

138. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit
139. Any existing reciprocating compressor that becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h) provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h). [40 CFR 60.593(c)] Federally Enforceable Through Title V Permit
140. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 °C as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit
141. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
142. The operator shall not burn in any fuel gas combustion device any fuel that contains hydrogen sulfide (H₂S) in excess of 0.1 gr/dscf (230 mg/dscm) [40 CFR 60.104(a)(1)] Federally Enforceable Through Title V Permit
143. For fuel gas combustion devices, a continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60.105(a)(3). CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, 60.105(a)(3)] Federally Enforceable Through Title V Permit
144. For fuel gas combustion devices, operator shall report all rolling 3-hour periods during which the average concentration of H₂S as measured by the H₂S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm) or during which the average concentration of SO₂ as measured by the SO₂ continuous monitoring system exceeds 20 ppm (dry basis, zero percent excess air). [40 CFR 60.105(e)(3)] Federally Enforceable Through Title V Permit
145. Operator shall determine compliance with the H₂S standard using EPA Methods 11, 15, 15A, or 16. [40 CFR 60.106(e)] Federally Enforceable Through Title V Permit
146. For any periods for which sulfur dioxide or oxides emissions data are not available, the operator shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 CFR 60.107(d)] Federally Enforceable Through Title V Permit
147. The owner or operator shall submit the reports required under this subpart to the District semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The owner or operator shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. [40 CFR 60.107(e) and 60.107(f)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

148. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit
149. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320] Federally Enforceable Through Title V Permit
150. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, 4305, and 4306] Federally Enforceable Through Title V Permit
151. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
152. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
153. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
154. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart GGG. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-33-405-0

EXPIRATION DATE: 08/31/2007

EQUIPMENT DESCRIPTION:

LIGHT CRUDE OIL TRUCK UNLOADING RACK WITH FOUR BAYS, EACH WITH TWO LIQUID UNLOADING ARMS

PERMIT UNIT REQUIREMENTS

1. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 2.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. Permit holder shall update such records when new components are approved and installed. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule] Federally Enforceable Through Title V Permit
4. There shall be no more than 696 disconnects per day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Total liquid drainage/leaks from all hose disconnects shall not exceed 8 ml per disconnect, averaged over a week. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain records of the number of disconnects per day, the quantity of excess liquid collected each week, and the calculated average liquid loss per disconnect. [District Rule 1070] Federally Enforceable Through Title V Permit
7. The operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit
8. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit
9. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Sections 5.1.4 exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit
10. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

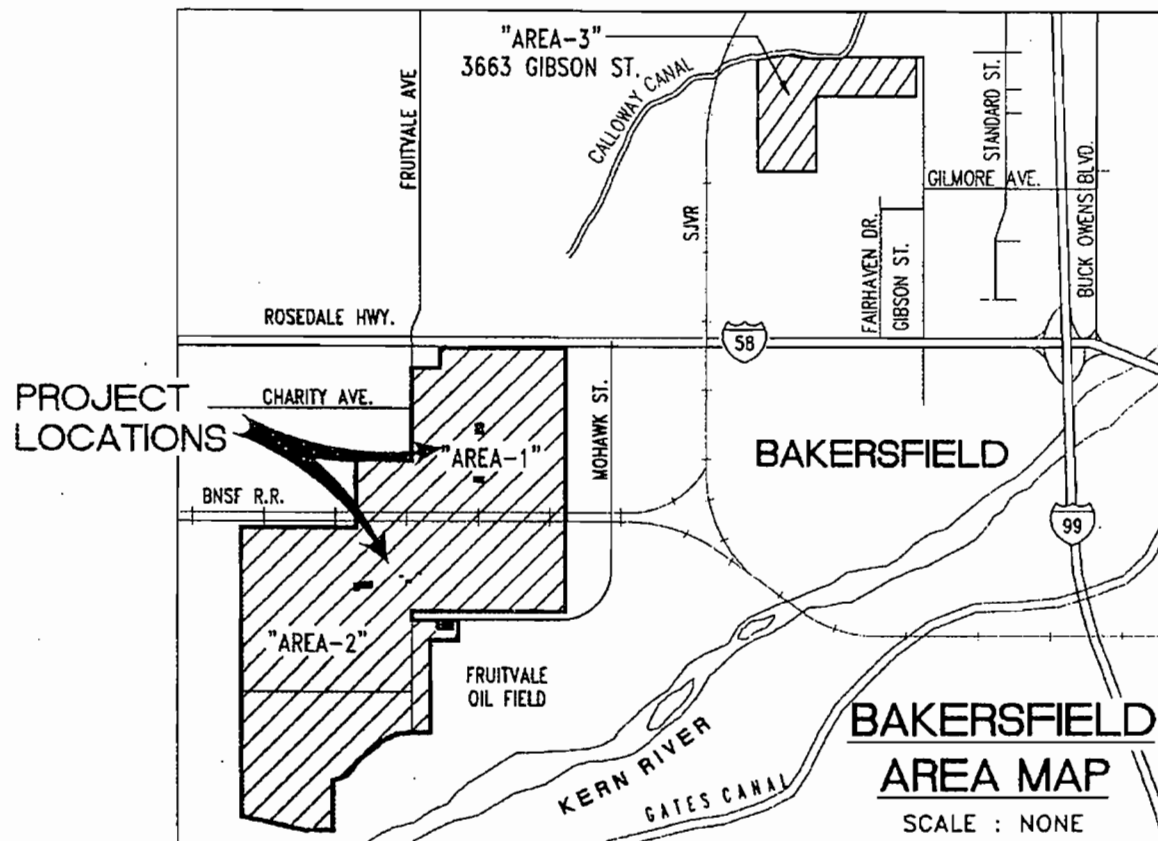
11. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit
12. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit
13. A component shall be considered leaking if one of more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of the rule exist at the facility. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit
14. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit
15. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit
16. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit
17. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of Rule 4455. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit
18. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit
19. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit
20. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

Attachment II Project Location Map

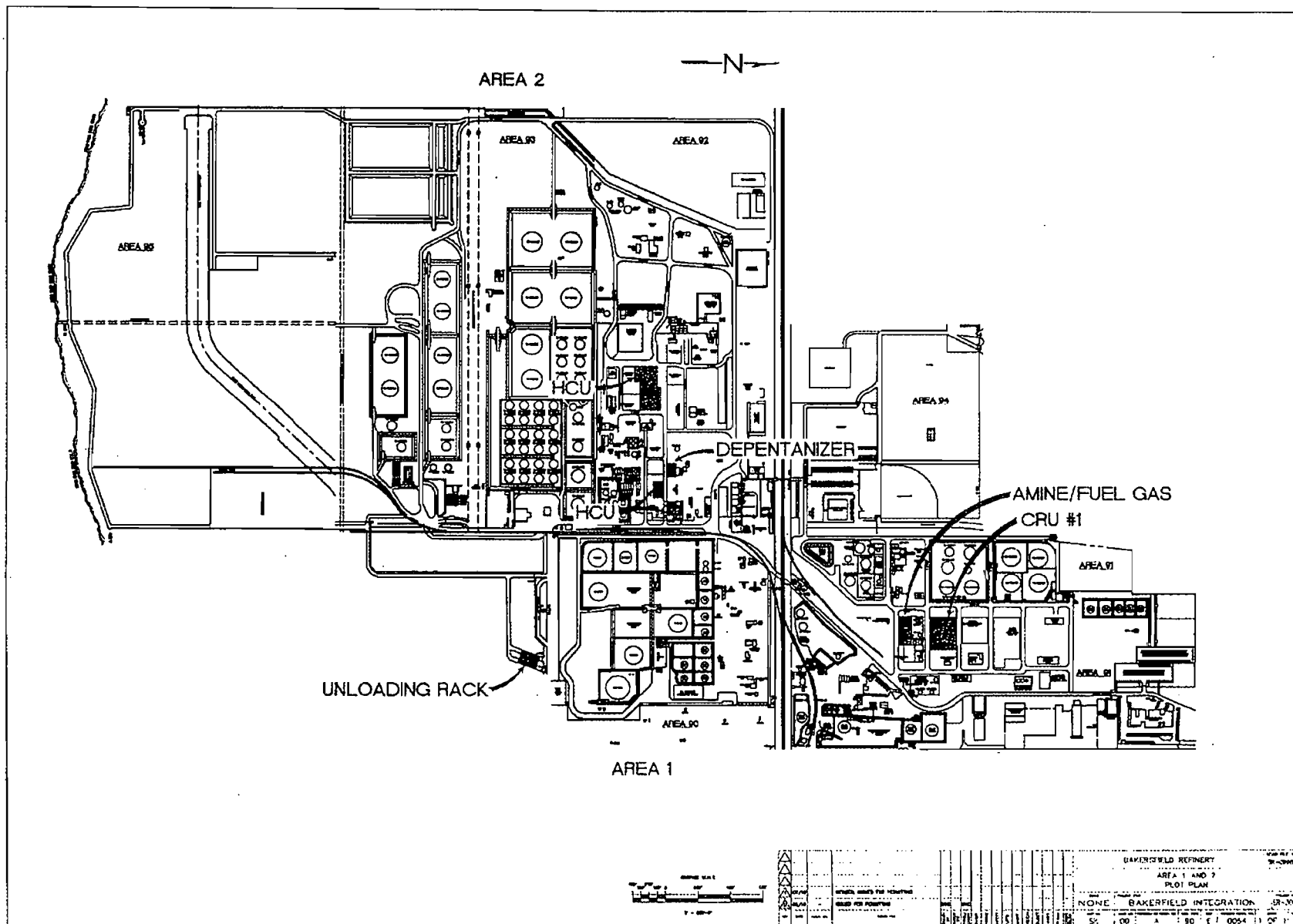
ALON BAKERSFIELD PROPERTY, INC.

6451 ROSEDALE HIGHWAY
BAKERSFIELD, CALIFORNIA 93308

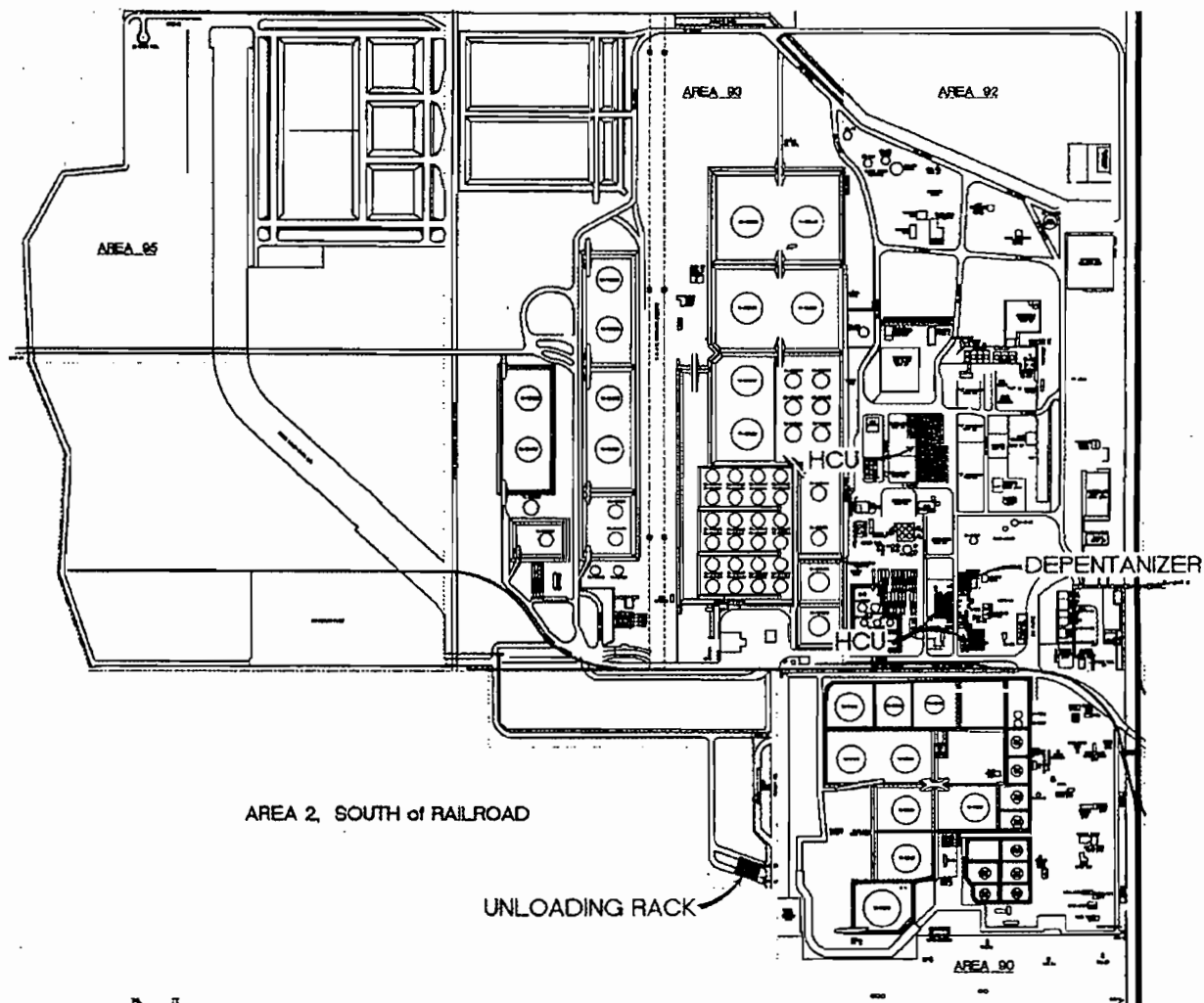


BAKERSFIELD REFINERY										HEAD FILE NO.
SITE LOCATION MAP										SP-12134
NONE										BAKERSFIELD INTEGRATION
SK	00	A	90	B	0110	1	01	1	2	

ATTACHMENT 3B



ATTACHMENT 3C



AREA 2, SOUTH of RAILROAD

UNLOADING RACK

N

BAKERSFIELD REFINERY		10-100-3
AREA 2 (PLANT) PLAN		
SOUTH OF RAILROAD		
NONE	BAKERSFIELD INTECHATION	10-100-3
CC	A 92.0	9109 1 OF 12

Attachment III Process Flow Diagrams

CURRENT

SOUR G.O. → MHC FEED TANKS → SOUR G.O. → MHC → SWEET G.O. → SALES

DIESEL → HC PRE TREAT → { HC ASU, HC CRACKING } → DIESEL SALES

RESUME REFINING

SOUR G.O. → CRUDE TANKS → SOUR G.O. → MHC FEED TANKS → SOUR G.O. → MHC → HC PRE TREAT → { HC CRACKING, HC CRACKING } → DIESEL SALES

DIESEL → HC PRE TREAT → { HC CRACKING, HC CRACKING } → DIESEL SALES

ACRONYMS:

- GO - GAS OIL
- MHC - MILD (LOW PRESSURE) HYDROCRACKER
- HC - HYDROCRACKER
- ASU - AROMATICS SATURATION UNIT
- HUX - HEAVY HYDROCRACKER NAPHTHA
- LUX - LIGHT HYDROCRACKER NAPHTHA
- NHT - NAPHTHA HYDROTREATER

PARAMOUNT PETROLEUM CORP.

DRN KS

DATE 03/24/10

APP

JOB NO.

RESUME REFINING AT BAKERSFIELD REFINERY

OVERVIEW

REV.	DATE	ISSUE	BY	CHK	APP	REFERENCE DWG.	REFERENCE DWG. DESCRIPTION

SCALE

CAD FILE

DWG. NUMBER
FIGURE 1

SHEET
1 OF 5

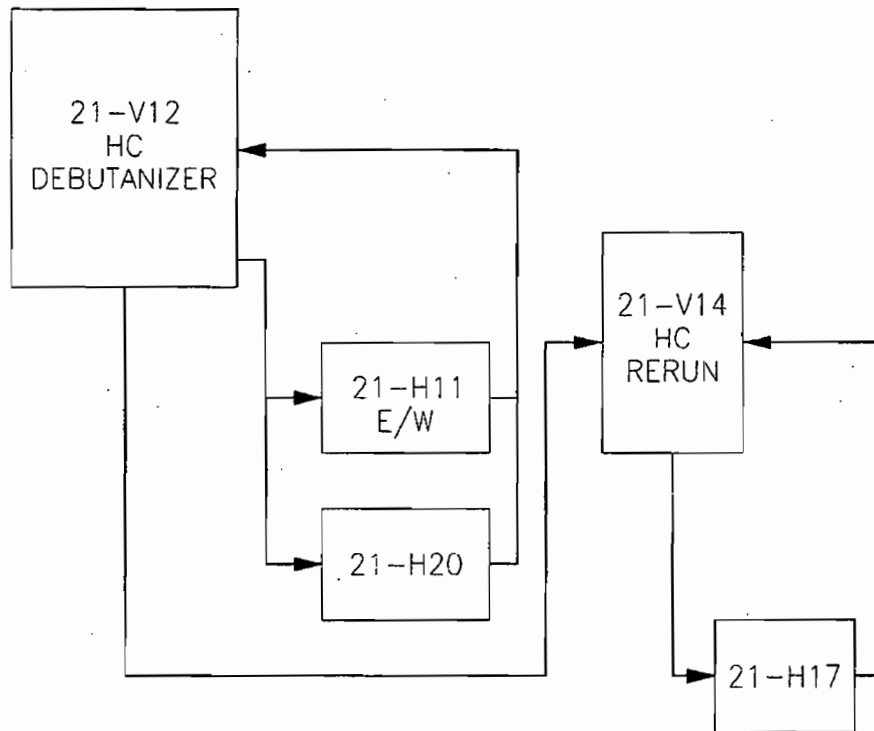
REV.

RESUME REFINING AT BAKERSFIELD REFINERY
OVERVIEW

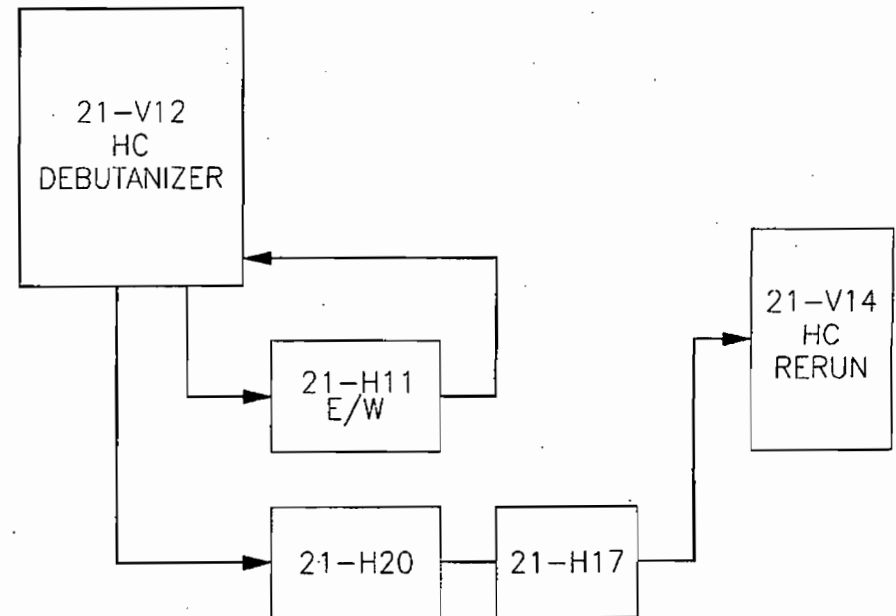
RESUME REFINING AT BAKERSFIELD REFINERY
OVERVIEW

SCALE	CAD FILE	DWG. NUMBER FIGURE 1	SHEET 1 OF 5	REV
-------	----------	--------------------------------	-----------------	-----

CURRENT



RESUME REFINING



ACRONYMS:

GO - GAS OIL
 MHC - MILD (LOW PRESSURE) HYDROCRACKER
 HC - HYDROCRACKER
 ASU - AROMATICS SATURATION UNIT
 HUX - HEAVY HYDROCRACKER NAPHTHA
 LUX - LIGHT HYDROCRACKER NAPHTHA
 NHT - NAPHTHA HYDROTREATER

PARAMOUNT PETROLEUM CORP.

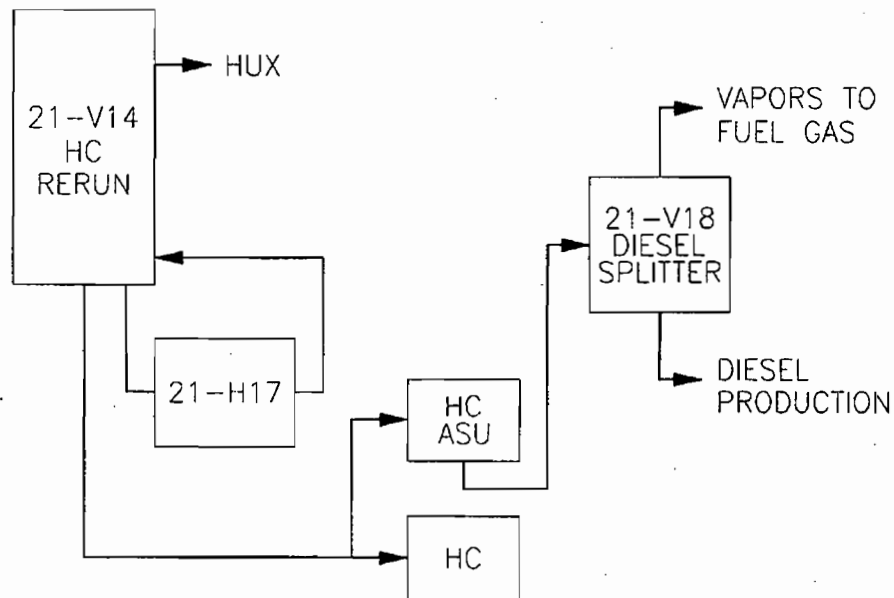
DRN DR
 DATE 03/24/10
 CHK
 APP
 JOB NO.

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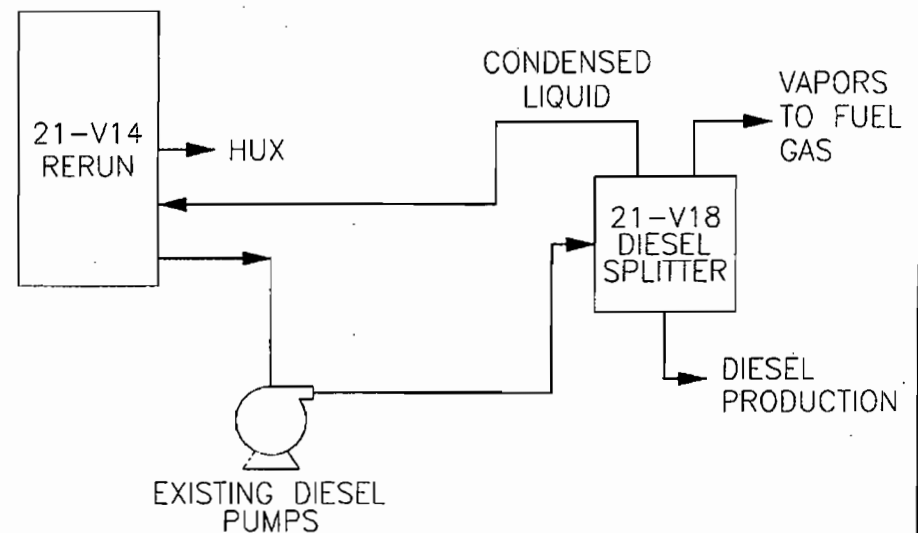
SCALE CAD FILE DWG. NUMBER SHEET REV.
 FIGURE 2 2 OF 5

REV.	DATE	ISSUE	BY	CHK	APP	REFERENCE DWG.	REFERENCE DWG. DESCRIPTION

CURRENT



RESUME REFINING



ACRONYMS:

GO - GAS OIL
 MHC - MILD (LOW PRESSURE) HYDROCRACKER
 HC - HYDROCRACKER
 ASU - AROMATICS SATURATION UNIT
 HUX - HEAVY HYDROCRACKER NAPHTHA
 LUX - LIGHT HYDROCRACKER NAPHTHA
 NHT - NAPHTHA HYDROTREATER

PARAMOUNT PETROLEUM CORP.

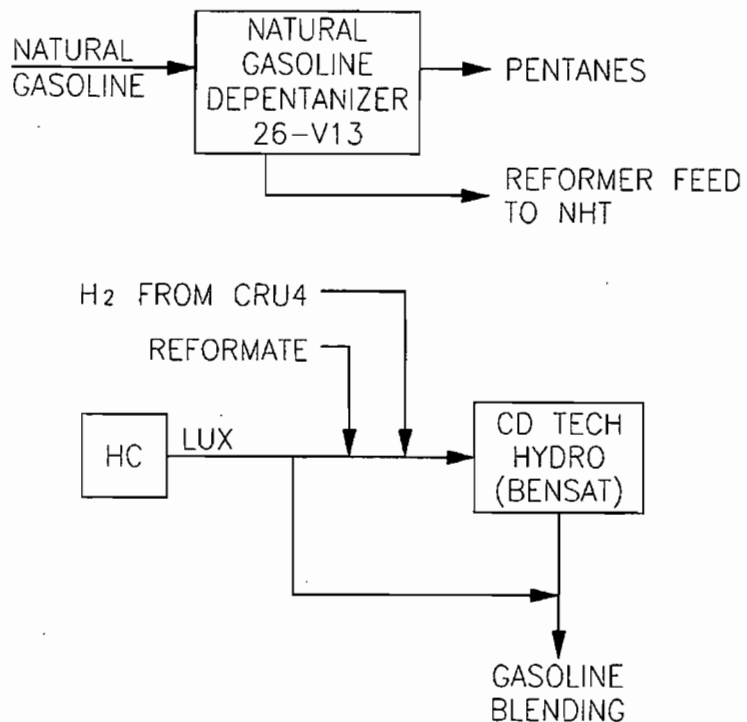
DRN DR
 DATE 03/24/10
 CHK
 APP

RESUME REFINING AT BAKERSFIELD REFINERY
 CONFIGURE HYDROCRACKER DIESEL SPLITTER
 21-V18 TO DIESEL SIDESTRIpper FOR 21-V14

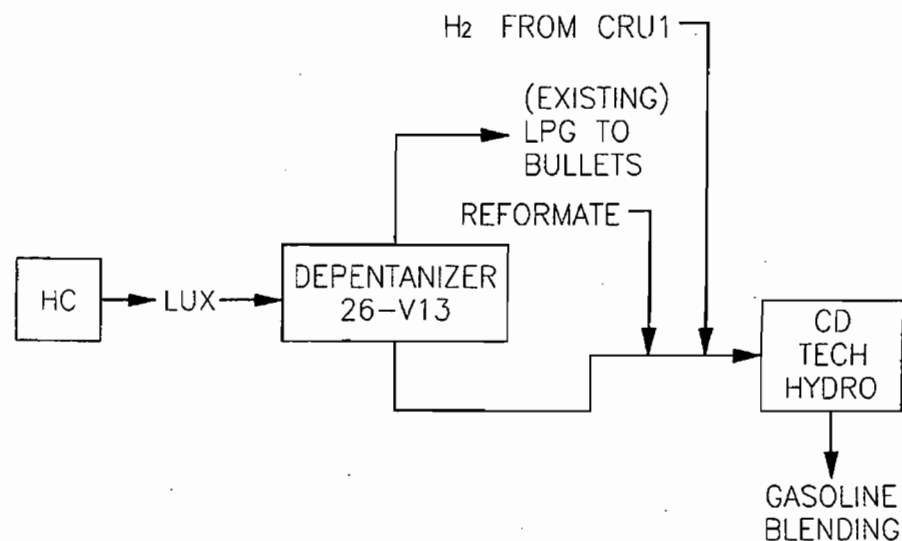
JOB NO.	SCALE	CAD FILE	DWG. NUMBER FIGURE 3	SHEET 3 OF 5	REV.
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REV.	DATE	ISSUE	BY	CHK	APP	REFERENCE DWG.	REFERENCE DWG. DESCRIPTION

CURRENT



RESUME REFINING



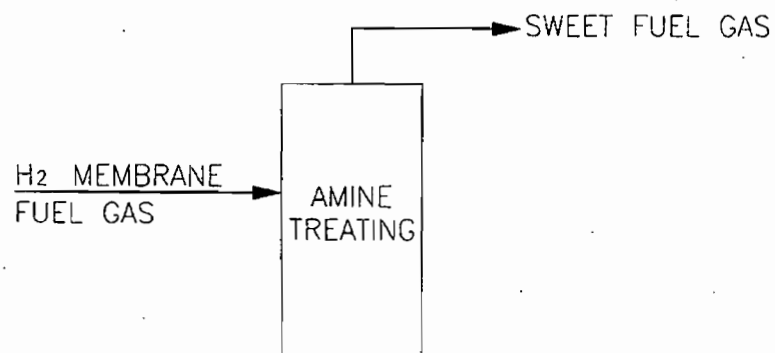
ACRONYMS:

GO - GAS OIL
MHC - MILD (LOW PRESSURE) HYDROCRACKER
HC - HYDROCRACKER
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HUX - HEAVY HYDROCRACKER NAPHTHA
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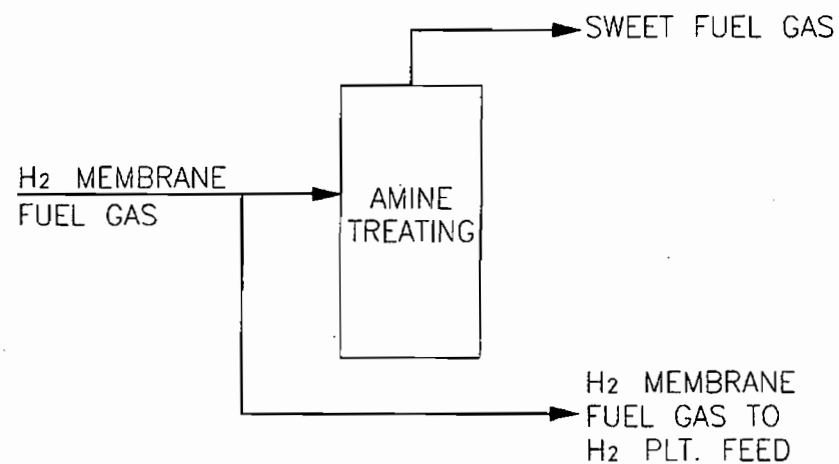
PARAMOUNT PETROLEUM CORP.

DRN	KS	RESUME REFINING AT BAKERSFIELD REFINERY ROUTE LIGHT NAPHTHA THROUGH DEPENTANIZER				
DATE	03/24/10					
CHK						
APP						
JOB NO.	SCALE	CAD FILE	DWG. NUMBER FIGURE 4	SHEET 4 OF 5	REV.	

CURRENT



RESUME REFINING



ACRONYMS:

GO - GAS OIL
 MHC - MILD (LOW PRESSURE) HYDROCRACKER
 HC - HYDROCRACKER
 ASU - AROMATICS SATURATION UNIT
 HUX - HEAVY HYDROCRACKER NAPHTHA
 LUX - LIGHT HYDROCRACKER NAPHTHA
 NHT - NAPHTHA HYDROTREATER

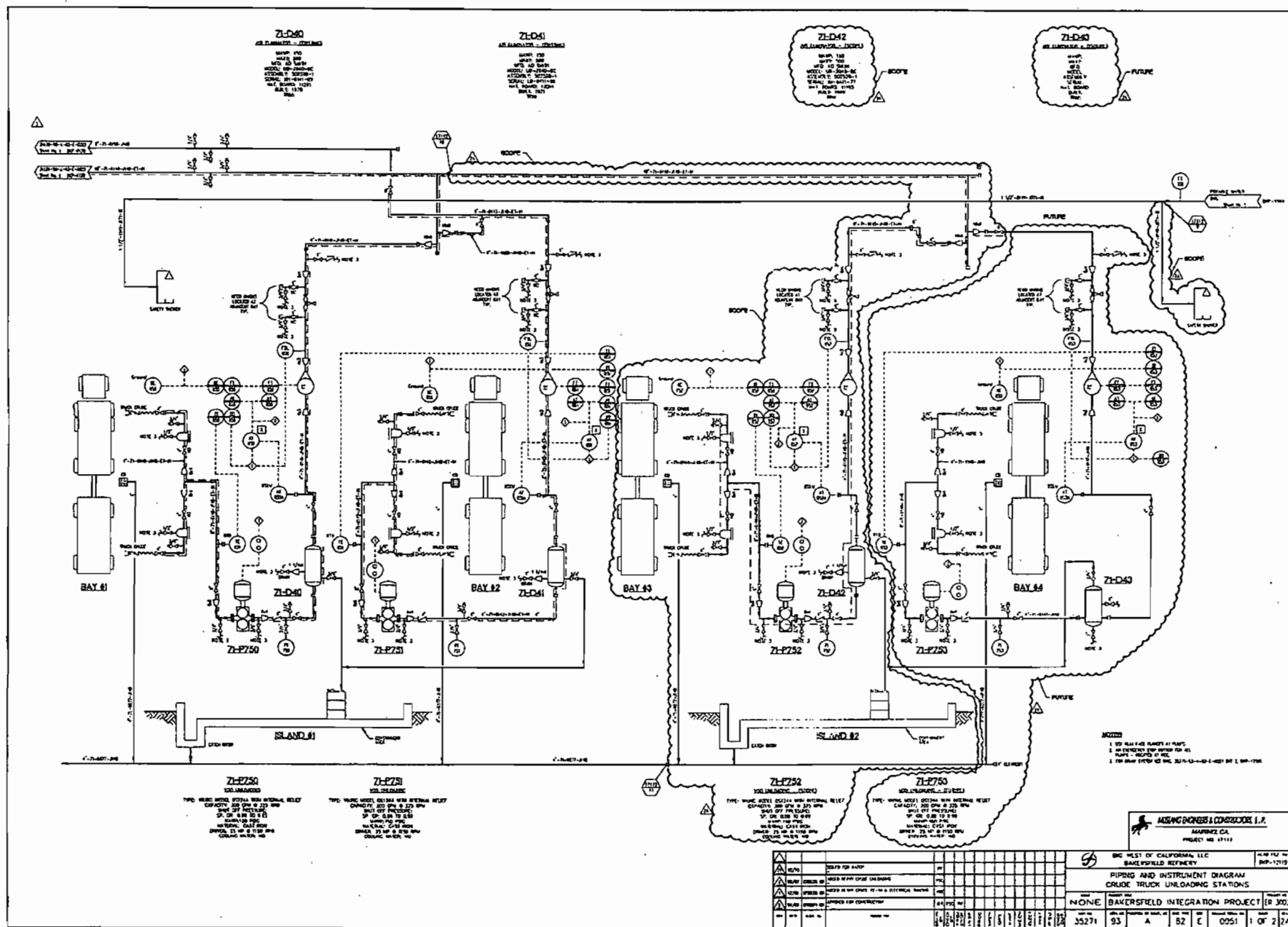
PARAMOUNT PETROLEUM CORP.

DRN KS
 DATE 03/24/10
 CHK
 APP

RESUME REFINING AT BAKERSFIELD REFINERY
 H2 MEMBRANE FUEL GAS TO H2 PLANT FEED

REV.	DATE	ISSUE	BY	CHK	APP	REFERENCE DWG.	REFERENCE DWG. DESCRIPTION	JOB NO.	SCALE	CAD FILE	DWG. NUMBER	SHEET	REV.
											FIGURE 5	5 OF 5	

FIGURE 9



Attachment IV Fugitive Emissions

ATTACHMENT 2

ALON BAKERSFIELD REFINERY

Fugitive Component Count and Potential to Emit Calculations

Rev Date 11/17/2010

Process Unit: Cat Reformer #1 Permit S-33-12 ABR Unit 9

Source Unit	Service	No. Of Existing Components	No. of New Components to be Installed (1)	Emission Factors (EF) (lbs/year)	Current Emission Baseline (lbs/year)	Emission Factors (EF) (lbs/year)	Incremental Emissions (lbs/year)	Post Modifications Emissions (lbs/year)	P.T.E. for Allowable Leaks (R4455) (# comp)	1 day leak at 50,000 ppm (lbs/day)
Valves	Gas / Vapor	392	6	0.920	360.64	0.920	5.52	366.16	3	1.17
	Light Liquid (2)	284	-	1.790	508.36	1.790	-	508.36		
	Heavy Liquid (3)		-	-	-	-	-	-		
Pumps	Light Liquid (2)		-	-	-	-	-	-		
	Light Liquid (2)	8	-	19.278	154.22	19.278	-	154.22	1	2.25
	Heavy Liquid (3)		-	-	-	-	-	-		
Compressors	Gas / Vapor	1	-	1.809	1.81	1.809	-	1.81	1	0.48
Flanges (ANSI 16.5-1988)	Gas / Vapor	409	12	0.522	213.50	0.522	6.26	219.76	3	1.48
Flanges (ANSI 16.5-1988)	Light Liquid (2)	249	-	0.516	128.48	0.516	-	128.48		
Connectors	Gas / Vapor	1,555	18	0.205	318.78	0.205	3.69	322.47	14	3.25
Connectors	Light Liquid (2)	1,219	-	0.224	273.06	0.224	-	273.06		
Pressure Relief Valves	Gas / Vapor	2	-	0.771	1.54	0.771	-	1.54	1	0.48
Pressure Relief Valves	Light Liquid (2)	1	-	3.110	3.11	3.110	-	3.11		
Process Drains with P-Trap or Seal Pot	All	16	-	1.434	22.94	1.434	-	22.94		
Other (including fittings, hatches, sight glasses and meters)	All	42	-	0.798	33.52	0.798	-	33.52	1	0.48
Total Count / Emissions	Count / lbs/year	4,178	36		2,019.96		15.47	2,035.43		
Total Count / Emissions	Count / lbs/day		4,214		5.53		0.04	5.58		9.59

(1) Any new component proposed to be installed due to the modification; this also includes new components to be installed to replace existing components.

(2) Light liquid and gas/liquid streams: Liquid or gas/liquid stream with a vapor pressure greater than that of kerosene (>0.1 psia @ 100°F or 689 Pa @ 38°C), based on the most volatile class present at 20% by volume. - used single mechanical seal EF

(3) Heavy Liquid: streams with a vapor pressure equal to or less than that of kerosene (< 0.1 psia @ 100°F or 689 Pa @ 38°C), based on the most volatile class present at 20% by volume.

ATTACHMENT 2

ALON BAKERSFIELD REFINERY

Rev Date 11/17/2010

Fugitive Component Count and Potential to Emit Calculations

Process Unit: Fuel Gas Permit S-33-14 ABR Unit 15

Source Unit	Service	No. Of Existing Components	No. of New Components to be Installed (1)	Emission Factors (EF) (lbs/year)	Current Emission Baseline (lbs/year)	Emission Factors (EF) (lbs/year)	Incremental Emissions (lbs/year)	Post Modifications Emissions (lbs/year)	PTE for Allowable Leaks (B4455) (lb comp)	1-day leak at 50,000 ppm (lbs/day)
Valves	SV/ABCP Approved I&M Program	302	17	0.288	86.98	0.288	4.90	91.87	2	0.78
	Gas/Vapor	83	-	0.251	20.83	0.251	-	20.83	-	-
	Light Liquid (2)	-	-	-	-	-	-	-	-	-
Pumps	Sealless Type	-	-	-	-	-	-	-	-	-
	Mechanical Seals	-	-	-	-	-	-	-	-	-
	Light Liquid (2)	-	-	-	-	-	-	-	-	-
Compressors	Mechanical Seals	-	-	-	-	-	-	-	-	-
	Heavy Liquid (3)	-	-	-	-	-	-	-	-	-
	Gas/Vapor	1	-	2.234	2.23	2.234	-	2.23	1	0.48
Flanges (ANSI 16.5-1988)	Gas/Vapor	312	30	0.439	136.97	0.439	13.17	150.14	2	0.99
Flanges (ANSI 16.5-1988)	Light Liquid (2)	88	-	0.414	36.43	0.414	-	36.43	-	-
Connectors	Gas/Vapor	1,492	54	0.146	217.83	0.146	7.88	225.72	8	1.86
Connectors	Light Liquid (2)	126	-	0.152	19.15	0.152	-	19.15	-	-
Pressure Relief Valves	Gas/Vapor	8	1	0.880	7.04	0.880	0.88	7.92	1	0.48
Pressure Relief Valves	Light Liquid (2)	-	-	-	-	-	-	-	-	-
Process Drains with Trap or Seal Pot	All	12	-	0.912	10.94	0.912	-	10.94	-	-
Other (including fittings, hatches, sight-glasses, and meters)	All	28	-	0.711	19.91	0.711	-	19.91	1	0.48
Total Count / Emissions	Count / lbs/year	2,452	102		558.32		26.83	585.15		
Total Count / Emissions	Count / lbs/day		2,554		1.53		0.07	1.60		5.06

(1) Any new component proposed to be installed due to the modification; this also includes new components to be installed to replace existing components.

(2) Light liquid and gas/liquid streams: Liquid or gas/liquid stream with a vapor pressure greater than that of kerosene (>0.1 psia @ 100°F or 689 Pa @ 38°C), based on the most volatile class present at 20% by volume. - used single mechanical seal EF

(3) Heavy Liquid: streams with a vapor pressure equal to or less than that of kerosene (<0.1 psia @ 100°F or 689 Pa @ 38°C), based on the most volatile class present at 20% by volume.

ATTACHMENT 2

ALON BAKERSFIELD REFINERY

Fugitive Component Count and Potential to Emit Calculations

Rev Date 11/17/2010

Process Unit: Cat Reformer #3 (Depent) Permit S-33-52 ABR Unit 26

Source Unit		Service	No. of Existing Components	No. of New Components to be Installed	Emission Factors (EF) (lbs/year)	Current Emission Baseline (lbs/year)	Emission Factors (EF) (lbs/year)	Incremental Emissions (lbs/year)	Post Modifications Emissions (lbs/year)	PTE for Allowable Leaks (R4455) (# comp)	1 day leak at 50,000 ppm (lbs/day)
Valves	SJVAPCD Approved I&M Program	Gas / Vapor	573	-	0.434	248.68	0.434	-	248.68	5	1.94
		Light Liquid (2)	442	12	0.415	183.43	0.415	4.98	188.41		
		Heavy Liquid (3)		-	-	-	-	-			
Pumps	Sealless Type	Light Liquid (2)		-	-	-	-	-	-		
	Mechanical Seals	Light Liquid (2)	8	-	19.377	155.02	19.377	-	155.02	1	2.25
	Mechanical Seals	Heavy Liquid (3)		-	-	-	-	-	-		
Compressors		Gas / Vapor	-	-	-	-	-	-	-		
Flanges (ANSI 16.5-1988)		Gas / Vapor	545	24	0.563	306.84	0.563	13.51	320.35	5	2.47
Flanges (ANSI 16.5-1988)		Light Liquid (2)	421	-	0.566	238.29	0.566	-	238.29		
Connectors		Gas / Vapor	1,988	36	0.214	425.43	0.214	7.70	433.14	16	3.72
Connectors		Light Liquid (2)	1,253	-	0.222	278.17	0.222	-	278.17		
Pressure Relief Valves		Gas / Vapor	16	-	0.811	12.98	0.811	-	12.98	1	0.48
Pressure Relief Valves		Light Liquid (2)	1	-	3.387	3.39	3.387	-	3.39		
Process Drums with P-Trap or Seal Pot		All	32	-	1.611	51.55	1.611	-	51.55		
Other (including fittings, hatches, sight glasses and meters)		All	91	-	0.874	79.53	0.874	-	79.53	1	0.48
Total Count / Emissions		Count / lbs/year	5,370	72		1,983.30		26.20	2,009.49		
Total Count / Emissions		Count / lbs/day		5,442		5.43		0.07	5.51		11.34

(1) Any new component proposed to be installed due to the modification; this also includes new components to be installed to replace existing components.

(2) Light liquid and gas/liquid streams: Liquid or gas/liquid stream with a vapor pressure greater than that of kerosene (>0.1 psia @ 100°F or 689 Pa @ 38°C), based on the most volatile class present at 20% by volume. - used single mechanical seal EF

(3) Heavy Liquid: streams with a vapor pressure equal to or less than that of kerosene (< 0.1 psia @ 100°F or 689 Pa @ 38°C), based on the most volatile class present at 20% by volume.

ATTACHMENT 2

ALON BAKERSFIELD REFINERY

Fugitive Component Count and Potential to Emit Calculations

Rev Date 11/17/2010

Process Unit: Hydrocracker Permit S-33-56 ABR Unit 21

Source Unit	Service	No. Of Existing Components	No. of New Components to be Installed (1)	Emission Factors (EF) (lbs/year)	Current Emission Baseline (lbs/year)	Emission Factors (EF) (lbs/year)	Incremental Emissions (lbs/year)	Post Modifications Emissions (lbs/year)
Valves	SJVAPCD Approved I&M Program							
	Gas / Vapor	1,116	32	0.421	469.84	0.421	13.47	483.31
	Light Liquid (2)	624	20	0.429	267.70	0.429	8.58	276.28
	Heavy Liquid (3)	288	106	4.440	1,278.72	0.429	45.47	1,324.19
Pumps	Sealless Type	-	-	-	-	-	-	-
	Mechanical Seals	17	-	16.483	280.21	16.483	-	280.21
	Mechanical Seals	9	-	402.000	3,618.00	16.483	-	3,618.00
Compressors	Gas / Vapor	4	-	235.336	941.34	235.336	-	941.34
Flanges (ANSI 16.5-1988)	Gas / Vapor	1,007	64	0.576	580.03	0.576	36.86	616.90
Flanges (ANSI 16.5-1988)	Light Liquid (2)	790	40	0.545	430.55	0.545	21.80	452.35
Flanges (ANSI 16.5-1988)	Heavy Liquid (3)	340	260	4.900	1,666.00	0.545	141.70	1,807.70
Connectors	Gas / Vapor	3,027	96	0.597	1,807.12	0.597	57.31	1,864.43
Connectors	Light Liquid (2)	4,686	60	0.184	862.22	0.184	11.04	873.26
Connectors	Heavy Liquid (3)	640	654	4.900	3,136.00	0.184	120.34	3,256.34
Pressure Relief Valves	Gas / Vapor	32	-	0.848	27.14	0.848	-	27.14
Pressure Relief Valves	Light Liquid (2)	6	-	0.815	4.89	0.815	-	4.89
Pressure Relief Valves	Heavy Liquid (3)	1	-	4.900	4.90	0.815	-	4.90
Process Drains with P-Trap or Seal Pot	All	58	-	3.117	180.79	3.117	-	180.79
Other (including fittings, hatches, sight glasses, and meters)	GV / LL	147	-	1.388	204.04	1.388	-	204.04
Other	Heavy Liquid (3)	28	-	4.900	137.20	1.145	-	137.20
Add Reported HLE Emissions					226.64			226.64
Total Count / Emissions	Count / lbs/year	12,820	1,332		16,123.32		456.58	16,579.90
Total Count / Emissions	Count / lbs/day		14,152		44.17		1.25	45.42

(1) Any new component proposed to be installed due to the modification; this also includes new components to be installed to replace existing components.

(2) Light liquid and gas/liquid streams: Liquid or gas/liquid stream with a vapor pressure greater than that of kerosene (>0.1 psia @ 100°F or 689 Pa @ 38°C), based on the most volatile class present at 20% by volume. - used single mechanical seal EF

(3) Heavy Liquid: streams with a vapor pressure equal to or less than that of kerosene (≤ 0.1 psia @ 100°F or 689 Pa @ 38°C), based on the most volatile class present at 20% by volume. Average Emission Factors are used for Existing Components. Light liquid factors were used for New components.

TABLE IV-3a: CAPCOA-REVISED 1995 EPA CORRELATION EQUATIONS AND FACTORS FOR REFINERIES AND MARKETING TERMINALS^a

Component Type/ Service Type	Default Zero Factor ^b lb/hr [kg/hr]	Correlation Equation ^c lb/hr [kg/hr]	Pegged Factor ^d lb/hr [kg/hr]	
			10,000 ppmv	100,000 ppmv
Valves/All	1.7E-05 [7.8E-06]	5.00E-06(SV)^{0.747} [2.27E-06(SV) ^{0.747}]	0.141 [0.064]	0.304 [0.138]
Pump seals/All	4.2E-05 [1.9E-05]	1.12E-04(SV)^{0.622} [5.07E-05(SV) ^{0.622}]	0.196 [0.089]	1.342 [0.610] ^e
Others ^f /All	8.8E-06 [4.0E-06]	1.92E-05(SV)^{0.642} [8.69E-06(SV) ^{0.642}]	0.181 [0.082]	0.304 [0.138]
Connectors/All	1.7E-05 [7.5E-06]	3.37E-06(SV)^{0.736} [1.53E-06(SV) ^{0.736}]	0.066 [0.030]	0.075 [0.034]
Flanges/All	6.8E-07 [3.1E-07]	9.92E-06(SV)^{0.706} [4.53E-06(SV) ^{0.706}]	0.209 [0.095]	0.209 [0.095]
Open-ended lines/All	4.4E-06 [2.0E-06]	4.19E-06(SV)^{0.724} [1.90E-06(SV) ^{0.724}]	0.073 [0.033]	0.180 [0.082]

^aSource: SBCAPCD Report, dated May 1, 1997, entitled *Review of the 1995 Protocol: The Correlation Equation Approach To Quantifying Fugitive Hydrocarbon Emissions At Petroleum Industry Facilities*. Technical corrections and adjustments were made to the refineries and marketing terminals bagged data, obtained by use of the blowthrough method, to account for the hydrocarbon leak flow rate.

^bThe default zero factors apply only when the screening value (SV), corrected for background, equals 0.0 ppmv (i.e., the screening value is indistinguishable from background reading). The default zero factors were based on the combined 1993 refinery and marketing terminal data only; default zero data were not collected from oil and gas production facilities.

^cThe correlation equations apply for actual screening values, corrected for background, between background and 9,999 ppmv and can be used for screening values up to 99,999 ppmv at the discretion of the local district.

^dThe 10,000 ppmv pegged factors apply for screening values, corrected for background, equal to or greater than 10,000 ppmv and are used when the correlation equations are used for screening values between background and 9,999 ppmv. The 100,000 ppmv pegged factors apply for screening values reported pegged at 100,000 ppmv and are used when the local district authorizes use of the correlation equations for screening values between background and 99,999 ppmv.

^eOnly 3 data points were available for the pump seals 100,000 ppmv pegged factor.

^fThe "other" component type includes instruments, loading arms, pressure relief valves, vents, compressors, dump lever arms, diaphragms, drains, hatches, meters, and polished rods stuffing boxes. This "others" component type should be applied for any component type other than connectors, flanges, open-ended lines, pumps, or valves. However, if an acceptable emission estimate exists which more accurately predicts emissions from the source, then that emission estimate applies (e.g., positive flowing junction boxes in SCAQMD). (For components such as junction box vents with positive flow, use the following correlation equation: $3.148E-04 (SV)^{1.02}$ lb/hr [1.428E-04(SV)^{1.02} kg/hr]).

Reference: California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, CAPCOA/ARB, February 1999
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Attachment V Emissions Profiles

Permit #: S-33-12-11	Last Updated
Facility: ALON	12/08/2010 EDGEHILR
BAKERSFIELD REFINING	

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	33680.0	26758.0	7110.0	62471.0	14452.0
Daily Emis. Limit (lb/Day)	461.1	73.2	19.4	768.9	40.4
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	886.0
Q2:	0.0	0.0	0.0	0.0	886.0
Q3:	0.0	0.0	0.0	0.0	887.0
Q4:	0.0	0.0	0.0	0.0	887.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-33-14-9	Last Updated
Facility: ALON BAKERSFIELD REFINING	12/16/2010 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	3601.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	9.9
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	481.0
Q2:	0.0	0.0	0.0	0.0	482.0
Q3:	0.0	0.0	0.0	0.0	482.0
Q4:	0.0	0.0	0.0	0.0	482.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-33-52-15	Last Updated
Facility: ALON	12/16/2010 EDGEHILR
BAKERSFIELD REFINING	

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	62561.0	14843.0	4700.0	184185.0	15066.0
Daily Emis. Limit (lb/Day)	171.5	40.6	12.8	504.6	41.3
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	1054.0
Q2:	0.0	0.0	0.0	0.0	1054.0
Q3:	0.0	0.0	0.0	0.0	1055.0
Q4:	0.0	0.0	0.0	0.0	1055.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Permit #: S-33-56-27	Last Updated
Facility: ALON BAKERSFIELD REFINING	12/08/2010 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	84010.0	52086.0	24161.0	467944.0	60458.0
Daily Emis. Limit (lb/Day)	373.1	142.7	60.9	1293.1	166.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	342.0
Q2:	0.0	0.0	0.0	0.0	342.0
Q3:	0.0	0.0	0.0	0.0	343.0
Q4:	0.0	0.0	0.0	0.0	343.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					1.5
Quarterly Offset Amounts (lb/Qtr)					
Q1:					513.0
Q2:					514.0
Q3:					514.0
Q4:					514.0

Permit #: S-33-405-1	Last Updated
Facility: ALON	12/08/2010 EDGEHILR
BAKERSFIELD REFINING	

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	0.0	0.0	0.0	0.0	4097.0
Daily Emis. Limit (lb/Day)	0.0	0.0	0.0	0.0	11.2
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	-155.0
Q2:	0.0	0.0	0.0	0.0	-155.0
Q3:	0.0	0.0	0.0	0.0	-156.0
Q4:	0.0	0.0	0.0	0.0	-156.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Attachment VI
BACT Guideline

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 7.2.2*

Last Update: 11/27/2006

Petroleum Refining - Valves & Connectors

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Leak defined as a reading of methane in excess of 100 ppmv above background when measure per EPA Method 21 and an Inspection and Maintenance Program pursuant to District Rule 4455		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source - Permit Specific BACT Determinations on Next Page(s)**

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 7.1.14*

Last Update: 9/21/2006

Light Crude Oil Unloading Rack

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 10 ml liquid per disconnect, and fugitive components subject to Rules 4409 or 4455 as applicable	use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 8 ml liquid per disconnect, and fugitive components subject to Rules 4409 or 4455 as applicable	

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source - Permit Specific BACT Determinations on Next Page(s)**

Attachment VII BACT Analysis

ATC S-33-12, '-14, '-52, and '-56 - Fugitive Emissions – Valves and Connectors

Top-Down Analysis for VOC Emissions

Step 1 - Identify All Possible Control Technologies

Leak defined as a reading of methane, in excess of 100 ppmv above background when measured per EPA Method 21 and an Inspection and Maintenance Program pursuant to District Rule 4455.

Step 2 - Eliminate Technologically Infeasible Options

There is no technologically infeasible option.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Leak defined as a reading of methane, in excess of 100 ppmv above background when measured per EPA Method 21 and an Inspection and Maintenance Program pursuant to District Rule 4455.

Step 4 - Cost Effectiveness Analysis

Since the applicant has chosen the most effective control technology listed in step 3 as a technologically feasible option; a cost effectiveness analysis is not required.

Step 5 - Select BACT

For the new fugitive emissions components - Leak defined as a reading of methane in excess of 100 ppmv above background on a portable hydrocarbon detection instrument calibrated with methane and an Inspection and Maintenance Program pursuant to District Rule 4455.

ATC #S-33-405 Light Crude Unloading Rack

BACT Guideline 7.1.14 lists the controls that are considered potentially applicable to light crude oil unloading racks. The VOC control measures are summarized below.

Top-Down BACT Analysis for VOC Emissions

Step 1 - Identify All Possible Control Technologies

Option I: Use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 10 mL liquid per disconnect, and fugitive emissions components subject to Rules 4409 or 4455 as applicable.

Option 2: Use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 8 mL liquid per disconnect, and fugitive emissions components subject to Rules 4409 or 4455 as applicable.

Step 2 - Eliminate Technologically Infeasible Options

All of the above alternatives are technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Option 2: Use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 8 mL liquid per disconnect, and fugitive emissions components subject to Rules 4409 or 4455 as applicable.

Option 1: Use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 10 mL liquid per disconnect, and fugitive emissions components subject to Rules 4409 or 4455 as applicable.

Step 4 - Cost Effectiveness Analysis

Applicant has selected the most stringent requirement in Step 1 therefore a Cost Effectiveness analysis is not required.

Step 5 - Select BACT

Use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 8 mL liquid, and fugitive emissions components subject to Rule 4624 (note that the level of stringency of the Rule 4624 fugitive emissions I&M Program is considered equivalent to that of Rule 4455).

Attachment VIII
Statewide and title V Compliance Certification

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- ☒ SIGNIFICANT PERMIT MODIFICATION ☐ ADMINISTRATIVE AMENDMENT
☐ MINOR PERMIT MODIFICATION

COMPANY NAME: Alon Bakersfield Refining	FACILITY ID: S- 33
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Alon Bakersfield Property, Inc.	
Agent to the Owner: Melinda Hicks	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- ☒ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Ed Juno
 Signature of Responsible Official

8/31/10
 Date

Ed Juno
 Name of Responsible Official (please print)

Vice President, West Coast Refining
 Title of Responsible Official (please print)

BAKERSFIELD REFINERY

November 29, 2010

Mr. Leonard Scandura
Permitting Manager
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308

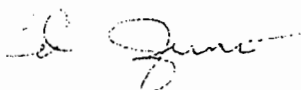
Re: Alon Bakersfield Refining Piping Modifications
Demonstration of Statewide Compliance
District Project Number S1104286

Dear Mr. Scandura:

Based on reasonable inquiry and to the best of my knowledge and belief, all major stationary sources, as defined in the jurisdiction where the facilities are located, that are owned or operated by Alon USA or Paramount Petroleum Corporation (or by any entity controlling, controlled by, or under common control with such person) in the State of California which are subject to emission limitations are in compliance or on a schedule for compliance with all applicable emission limitations and standards.

Please contact Melinda Hicks at (661) 326 4422 or June Christman at (562) 748 4704 if you have any questions regarding this letter.

Sincerely,



Ed Juno
Vice President of West Coast Refining

cc: Richard Karrs, SJVAPCD
Richard Edgehill, SJVAPCD
June Christman, Paramount Petroleum Corp.
Melinda Hicks, Alon Bakersfield Refining

jc
file: 725,318
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Attachment IX
HRA

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Richard Edgehill, AQE – Permit Services
From: Ester Davila, SAQS – Technical Services
Date: December 14, 2010
Facility Name: Alon Bakersfield Refinery
Location: 6451 Rosedale Highway
Application #(s): S-33-12-11, 14-9, 52-15, 56-27, 405-1
Project #: S-1104286

A. RMR SUMMARY

RMR Summary			
Categories	Fugitives (Units 12-11, 14-9, 52-15, 56-27, 405-1)	Project Totals	Facility Totals
Prioritization Score	0.01	0.01	>1.0
Acute Hazard Index	0.00	0.00	0.07
Chronic Hazard Index	0.00	0.00	0.06
Maximum Individual Cancer Risk (10^{-6})	0.037	0.037	9.91*
T-BACT Required?	No		
Special Permit Conditions?	No		

*The facility has nearly reached its max individual cancer risk of 10^{-6}

Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Units # 12-11, 14-9, 52-15, 56-27, 405-1

No special conditions are required.

B. RMR REPORT

I. Project Description

Technical Services received a request on November 30, 2010, to perform a Risk Management Review for a the modification of several units' piping along with adding two loading bays with two liquid unloading arms to the light crude oil truck unloading rack.

II. Analysis

Technical Services performed a prioritization using the District's HEARTs database. Since the total facility prioritization score was greater than one, a refined health risk assessment was required. Emissions calculated using the VOC rates provided by the project engineer and the emission factors for fugitives from light oil field equipment were input into the HEARTs database. The AERMOD model was used, with the parameters outlined below and concatenated meteorological data for 2005-2009 from Bakersfield to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the Hot Spots Analysis and Reporting Program (HARP) risk assessment module to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Analysis Parameters Units 12-11, 14-9, 52-15, 56-27, 405-1			
Source Type	Area	Location Type	Urban
Release Height (m)	3.05	Closest Receptor (m)	437
Side of Area. (m)	402	Type of Receptor	Res/Business
VOC (lb/hr)	0.18	Max Hours per Year	8760
VOC (lb/yr)	1577		

III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk factor associated with the project is less than 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

Attachments:

- A. RMR Request
- B. Additional Information
- C. Toxic Emissions Summary
- D. Prioritization Score
- E. HARP Report
- F. Facility Summary

Attachment X
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-33-12-11

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: ALON BAKERSFIELD REFINING
MAILING ADDRESS: 6451 ROSEDALE HWY (AREA 1 & 2)
BAKERSFIELD, CA 93308

LOCATION: 6451 ROSEDALE HWY (AREA 1 & 2)
BAKERSFIELD, CA 93308

SECTION: 27 **TOWNSHIP:** 29S **RANGE:** 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF CATALYTIC REFORMER #9 INCLUDING 4 REACTORS 9-R1, R2, R3 AND R4, 4 REFINERY FUEL GAS-FIRED HEATERS 38.5 MMBTU/HR 9-H1 AND 30.8 MMBTU/HR 9-H2 EACH WITH A CALLIDUS LOW NOX BURNER, 18.2 MMBTU/HR 9-H3 AND 9.2 MMBTU/HR 9-H4 EACH WITH A JOHN ZINK COOLSTAR LOW NOX BURNER, SEPARATOR 9-V3, DEPROPANIZER 9-V4, 10.1 MMBTU/HR REBOILER HEATER 9-H5 WITH A JOHN ZINK COOLSTAR LOW NOX BURNER, AND MISC PUMPS, PIPING, & VESSELS - AREA 1: PIPING MODIFICATIONS FOR PROCESSING OF GAS OIL

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Fugitive volatile organic compound (VOC) emissions shall not exceed 26.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit

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YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

S-33-12-11; Dec 17 2010 10:37AM - EDG/EHLR : Joint Inspection NOT Required

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5. Leaks from valves, connectors, and other components (except pumps and compressor seals) associated with piping modifications to route hydrogen rich stream from Catalytic Reforming Unit # 9-D8 to CD Hydro Tech and subject to the provisions of Rule 4455 shall be defined as a VOC reading in excess of 100 ppmv above background on a portable hydrocarbon detection instrument calibrated with methane per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule] Federally Enforceable Through Title V Permit
7. Permittee shall meet all applicable requirements of NSPS Subparts A and J. [District Rule 4001] Federally Enforceable Through Title V Permit
8. Except during startup and shutdown, heaters 9H1 - 9H4 (common stack) and 9H5 emission rates shall not exceed any of the following: NOx (as NO2): 0.036 lb/MMBtu or 30 ppmvd @ 3% O2; CO: 400 ppmvd @ 3% O2, VOC: 0.0055 lb/MMBtu, PM10: 0.0076 lb/MMBtu, or SOx (as SO2): 0.0286 lb/MMBtu. [District Rules 2201, 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
9. Emission rates from heater 9H1 shall not exceed any of the following: PM10: 7.0 lb/day, SOx (as SO2): 26.4 lb/day, VOC: 1.7 lb/day, NOx (as NO2): 166.3 lb/day or 12,155 lb/year, or CO: 277.2 lb/day or 22,664 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates from heater 9H2 shall not exceed any of the following: PM10: 5.6 lb/day, SOx (as SO2): 21.1 lb/day, VOC: 4.1 lb/day, NOx (as NO2): 133.1 lb/day or 9,709 lb/year, or CO: 221.8 lb/day or 18,131 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Emission rates from heater 9H3 shall not exceed any of the following: PM10: 3.3 lb/day, SOx (as SO2): 12.5 lb/day, VOC: 2.4 lb/day, NOx (as NO2): 78.6 lb/day or 5,731 lb/year, or CO: 131.0 lb/day or 10,714 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Emission rates from heater 9H4 shall not exceed any of the following: PM10: 1.7 lb/day, SOx (as SO2): 6.3 lb/day, VOC: 1.2 lb/day, NOx (as NO2): 39.7 lb/day or 2,884 lb/year, or CO: 66.2 lb/day or 5,416 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Emission rates from heater 9H5 shall not exceed any of the following: PM10: 1.8 lb/day, SOx (as SO2): 6.9 lb/day, VOC: 1.3 lb/day, NOx (as NO2): 43.6 lb/day or 3,176 lb/year, or CO: 72.7 lb/day or 5,946 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. For heaters 9H1, 9H2, 9H3, 9H4, & 9H5, compliance with annual CO emission rate shall be determined by using CO emission concentrations obtained during monthly monitoring as required in this permit, fuel use, fuel heating value, and stack gas flow rate. Records of calculated CO emissions shall be maintained for a period of five years and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
15. For heaters 9H1, 9H2, 9H3, 9H4, & 9H5, duration of start-up and shutdown shall not exceed 2 hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
16. Permittee shall maintain records of duration of each start-up and shutdown for a period of five years and make such records readily available for District inspection upon request. [District Rules 2080, 4305, and 4306] Federally Enforceable Through Title V Permit
17. For each heater, the permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

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18. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 2520, 9.4.2, 4305, and 4306] Federally Enforceable Through Title V Permit
21. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
22. Source testing to measure natural gas-combustion NO_x and CO emissions from each heater shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
23. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
24. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
25. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
26. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
27. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
28. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
29. Permittee shall maintain records of hhv of fuel burned and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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30. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
31. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. {588} Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
33. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
34. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
35. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
36. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
37. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520, 9.3.2, 4305, 6.2.1, and 4351, 6.2.1] Federally Enforceable Through Title V Permit
38. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801] Federally Enforceable Through Title V Permit
39. Nitrogen oxide (NO_x) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO₂/MMBtu of heat input (hhv). [District Rules 2520, 9.3.2, 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
40. Nitrogen oxide (NO_x) emissions shall not exceed 140 lb/hr, calculated as NO₂. [District Rule 4301, 5.2.2] Federally Enforceable Through Title V Permit
41. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2] Federally Enforceable Through Title V Permit

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42. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2] Federally Enforceable Through Title V Permit
43. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2] Federally Enforceable Through Title V Permit
44. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4] Federally Enforceable Through Title V Permit
45. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5] Federally Enforceable Through Title V Permit
46. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1] Federally Enforceable Through Title V Permit
47. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2] Federally Enforceable Through Title V Permit
48. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrocarbon detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4] Federally Enforceable Through Title V Permit
49. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5] Federally Enforceable Through Title V Permit
50. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6] Federally Enforceable Through Title V Permit
51. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1] Federally Enforceable Through Title V Permit

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52. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2] Federally Enforceable Through Title V Permit
53. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1] Federally Enforceable Through Title V Permit
54. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2] Federally Enforceable Through Title V Permit
55. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3] Federally Enforceable Through Title V Permit
56. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
57. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1] Federally Enforceable Through Title V Permit
58. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2] Federally Enforceable Through Title V Permit
59. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3] Federally Enforceable Through Title V Permit
60. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1] Federally Enforceable Through Title V Permit

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61. A readily visible identification in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2] Federally Enforceable Through Title V Permit
62. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2] Federally Enforceable Through Title V Permit
63. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3] Federally Enforceable Through Title V Permit
64. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1, and 4452, 6.2.1] Federally Enforceable Through Title V Permit
65. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit
66. The operator shall not burn in any fuel gas combustion device any fuel that contains hydrogen sulfide (H₂S) in excess of 0.1 gr/dscf (230 mg/dscm). [40 CFR 60.104(a)(1)] Federally Enforceable Through Title V Permit
67. For fuel gas combustion devices, a continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60.105(a)(3). CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, 60.105(a)(3)] Federally Enforceable Through Title V Permit
68. For fuel gas combustion devices, operator shall report all rolling 3-hour periods during which the average concentration of H₂S as measured by the H₂S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm) or during which the average concentration of SO₂ as measured by the SO₂ continuous monitoring system exceeds 20 ppm (dry basis, zero percent excess air). [40 CFR 60.105(e)(3)] Federally Enforceable Through Title V Permit
69. Operator shall determine compliance with the H₂S standard using EPA Methods 11, 15, 15A, or 16. [40 CFR 60.106(e)] Federally Enforceable Through Title V Permit
70. For any periods for which sulfur dioxide or oxides emissions data are not available, the operator shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 CFR 60.107(d)] Federally Enforceable Through Title V Permit
71. The owner or operator shall submit the reports required under this subpart to the District semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The owner or operator shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. [40 CFR 60.107(e) and 60.107(f)] Federally Enforceable Through Title V Permit
72. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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73. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
74. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
75. {4194} Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
76. {4253} Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-33-14-9

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: ALON BAKERSFIELD REFINING
MAILING ADDRESS: 6451 ROSEDALE HWY (AREA 1 & 2)
BAKERSFIELD, CA 93308

LOCATION: 6451 ROSEDALE HWY (AREA 1 & 2)
BAKERSFIELD, CA 93308

SECTION: 27 TOWNSHIP: 29S RANGE: 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF AMINE TREATER UNIT #15 INCLUDING FEED KNOCKOUT DRUM (15-D2), AMINE CONTRACTOR (15-V6) AND REGENERATOR VESSEL (15-V8), TREATED GAS KNOCKOUT DRUM (15-C3), RICH AMINE FLASH DRUM (15-D12), AMINE SURGE DRUM (15-T1), AMINE BULK TANK (15-T4), PRE-FILTER, COALESCER, STRAINER TO FUEL GAS KNOCKOUT DRUM (15-D8), & MISC PIPING, PUMPS, HEAT EXCHANGERS, & VESSELS - AREA 1: PIPING MODIFICATIONS FOR PROCESSING OF GAS OIL

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Fugitive volatile organic compound (VOC) emissions, as determined by annual component count and District approved emission factors, shall not exceed 9.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

DAVID WARNER, Director of Permit Services

S-33-14-9: Dec 17 2010 10:37AM - EDGHEILR : Joint Inspection NOT Required

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5. Leaks from valves, connectors, and other components (except pumps and compressor seals) associated with piping modifications to route membrane fuel gas to the Hydrogen Generation Unit 20-D20 and subject to the provisions of Rule 4455 shall be defined as a VOC reading in excess of 100 ppmv above background on a portable hydrocarbon detection instrument calibrated with methane per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule] Federally Enforceable Through Title V Permit
7. VOCs collected in feed knockout drum shall be discharged to Area I gas plant or flare systems. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Amine surge drum (15-T1) and amine bulk tank (15-T4) vapors shall discharge only to vapor recovery system or the Area 1 flare header upstream of water seal drum. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Sour gas shall discharge only to amine treater, sulfur recovery plant or, under breakdown conditions, to the flare, as provided for under Rules 1100 and 4001, Subparts A and J. [District NSR Rule, 1100 and 4001] Federally Enforceable Through Title V Permit
10. All tank openings and fittings shall remain gas tight (as defined by Rule 4623) at all times, except for those periods described below when operation of the vapor control system is not required. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Amine surge tank (15-T1) and amine bulk tank (15-T4) may be disconnected from vapor control system during maintenance and cleaning periods provided liquids and vapors subject to Rule 4623 are completely removed and vapor lines are isolated. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Tanks 15-T1 and 15-T4 shall be purged of odorous material (i.e. nitrosamines, sulfur compounds, etc.) prior to opening tanks and disconnection from the vapor control system. [District NSR Rule and 4102] Federally Enforceable Through Title V Permit
13. Permittee shall receive written or faxed approval from the District Compliance division prior to tank vapor control system disconnection. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Upon reconnection to vapor control system, permittee shall demonstrate using a portable hydrocarbon monitor that all tank pressure relief valves and other fugitive components associated with the tank are leak free, as defined in Rule 4623. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Valves, threaded connections, and flanges shall not leak VOCs at a rate of more than three (3) drops per minute or leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking components of any component type does not exceed two (2) percent of the total number of components of that type. [District Rule 4451, 5.1.1 & 5.1.2] Federally Enforceable Through Title V Permit
16. Pressure relief valves (PRVs) shall not leak VOCs in excess of 10,000 ppm above background when measured in the plane at the centroid of any atmospheric vent with an instrument calibrated with methane, provided the total number of leaking PRVs does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2] Federally Enforceable Through Title V Permit
17. Process drains shall not leak VOCs in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter of the potential source with an instrument calibrated with methane, provided the total number of leaking process drains does not exceed two (2) percent. [District Rule 4451, 5.1.1 & 5.1.2] Federally Enforceable Through Title V Permit
18. The facility shall not use any valve, other than a valve on a product sampling line, a safety pressure relief valve, or a double block and bleeder valve, which is located at the end of a pipe or line containing VOCs unless such valve is sealed with a blind flange, plug, or cap; not including loading spouts and water drain valves. [District Rule 4451, 5.1.4] Federally Enforceable Through Title V Permit
19. Every leaking valve, flange, threaded connection, process drain and pressure relief valve shall be affixed with a record of inspection which shall bear a legible record of all inspections for at least a fifteen month period or coded with the records kept in a centralized location. [District Rule 4451, 5.1.5] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. All valves, threaded connections and PRVs handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. If less than two (2) percent of the components of any component type, except PRVs, are found to leak during each five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. If any annual inspection shows that two (2) percent or more of all of a specific component type subject to the prohibitions of this rule are leaking, then quarterly inspections of that component type shall be resumed. [District Rule 4451, 5.2.1] Federally Enforceable Through Title V Permit
21. All flanges and process drains handling VOCs shall be inspected for leakage with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every 12 months. [District Rule 4451, 5.2.2] Federally Enforceable Through Title V Permit
22. Within three (3) days after any pressure relief valve vents to the atmosphere, the operator shall inspect with a portable hydrogen detection instrument any such PRV and shall repair any leak. The inspection shall be accomplished by sampling for vapors with a portable hydrocarbon detection instrument and by visual examination for indication of liquid leakage. [District Rule 4451, 5.2.3 & 5.2.4] Federally Enforceable Through Title V Permit
23. Any leaking valve, PRV, threaded connection, flange and process drain shall be identified by affixing a weatherproof, readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until repair and reinspection documents compliance with the requirements of Rule 4451 (Amended December 17, 1992). [District Rule 4451, 5.2.5] Federally Enforceable Through Title V Permit
24. Each leak detected shall be recorded on the inspection record along with the date of inspection, component identification number, actual instrument reading, and the inspector's initials. [District Rule 4451, 5.2.6] Federally Enforceable Through Title V Permit
25. Within 15 days after detection any valve, pressure relief valve, flange, threaded connection, or process drain found to leak shall be repaired or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25. [District Rule 4451, 5.3.1] Federally Enforceable Through Title V Permit
26. If a valve, pressure relief valve, flange, threaded connection, or process drain is found to leak and cannot be repaired to a no-leak condition without requiring the shutdown of essential refinery operations, the following repair schedule shall apply: (a) If the leak rate is less than ten (10) drops per minute the APCO shall be notified of the expected date of repair, not to exceed one (1) year or the date of the next process unit turnaround whichever is less for each valve, pressure relief valve, flange, threaded connection, and process drain, and the actual date of repair for each valve, pressure relief valve, flange, threaded connection, and process drain. (b) If the leak rate is greater than nine (9) drops per minute or 10,000 ppm measured one (1) centimeter from the source, the APCO shall be notified of an emergency repair, within 15 days after detection, to reduce the leak to less than ten (10) drops per minute or 10,000 ppm as methane measured one (1) centimeter from the source, or the venting, within 30 days after detection, of the emission to a flare or vapor control system that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25, or a demonstration, with 30 days after detection, that the repair schedules are infeasible. The demonstration shall include documentation that the component is an essential device and that no vapor control device that satisfies the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 exists. (c) Repair an essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4451, 5.3.2] Federally Enforceable Through Title V Permit
27. Analysis of halogenated exempt compounds shall be by ARB Method 422. [District Rule 4451, 6.3.1] Federally Enforceable Through Title V Permit
28. Efficiency of VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, as applicable. [District Rule 4451, 6.3.2] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

29. The TVP of organic liquids, including light crude and petroleum distillates, shall be measured using Reid vapor pressure ASTM Method No. D-323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 1000F, TVP may be determined by Reid Vapor pressure at 1000F and ARB approved calculations. Organic liquids listed in Rule 4451 (Amended December 17, 1992), Table 1 shall be deemed to be in compliance with the appropriate vapor pressure limits for the material, provided actual operating temperature does not exceed the corresponding maximum temperature listed. [District Rule 4451, 6.3.3] Federally Enforceable Through Title V Permit
30. Copies of the inspection log shall be retained by the operator for a minimum of five (5) years after the date of an entry and made available upon request to District personnel. [District Rules 4451, 6.2.2, 6.2.3, and 2520, 9.4.2] Federally Enforceable Through Title V Permit
31. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall be inspected for leaks with a portable hydrocarbon detection instrument in accordance with EPA Method 21 at least once every three (3) months. [District Rule 4452, 5.1.1] Federally Enforceable Through Title V Permit
32. Any pump shall be visually inspected weekly. Whenever volatile organic liquids are observed dripping from a pump seal, the seal shall be checked within three (3) day with a portable hydrocarbon detection instrument in accordance with EPA Method 21 to determine if a leak is present or the drippage stopped with the same time frame. [District Rule 4452, 5.1.2] Federally Enforceable Through Title V Permit
33. Pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors shall not leak in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source with an instrument calibrated with methane or the drip liquid VOCs at a rate of more than three (3) drops per minute. [District Rule 4452, 5.1.3] Federally Enforceable Through Title V Permit
34. Any person operating a pump or compressor which handles a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which is leaking shall repair the leaking device within 15 calendar days. If the leaking device is essential and cannot be repaired within 15 days after detection, one (1) of the following actions shall be taken: (a) replace the leaking device and inspect for leaks within three days after detection, (b) vent emissions to vapor recovery device that is at least 94 percent efficient as measured by EPA Method 25, or to a flare that satisfies the requirements of 40 CFR 60.18, or (c) repair the essential device to eliminate the leak during the next process unit shutdown, but in no case later than one (1) year from the date of the original leak detection. [District Rule 4452, 5.2.1] Federally Enforceable Through Title V Permit
35. A readily visible identification, in the form of a weather-proof tag shall be attached to any pumps or compressors which handle a VOC or any associated seal fluid system which circulates a fluid through or between seals on process pumps or compressors which leaks. Pumps or compressors which handle a VOC, or any associated seal fluid systems which circulates a fluid through or between seals on process pumps or compressors, to be repaired at the next shutdown shall be tagged, marked or coded in a manner easily identifiable by District personnel. [District Rule 4452, 5.2.2] Federally Enforceable Through Title V Permit
36. Sampling of a seal shall be performed one (1) centimeter from the outer end of the shaft seal interface or at a distance of one (1) centimeter of any other point on the seal which could leak. [District Rule 4452, 6.3.1.2] Federally Enforceable Through Title V Permit
37. Sampling of atmospheric vents on pump and compressor fluid systems shall be measured in the plane of the opening of the vent at the centrad. [District Rule 4452, 6.3.1.3] Federally Enforceable Through Title V Permit
38. Each operator shall maintain an inspection log containing, at a minimum, the following: name, location, type of components, and description of any unit where leaking components are found; date of leak detection, emission level (ppm) of leak, and method of detection; date and emission level of recheck after leak is repaired; identification of leaks that cannot be repaired until next process unit turnaround; total number of components inspected, and total number and percentage of leaking components found for each component type. [District Rules 4451, 6.2.1 & 4452, 6.2.1] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

39. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit
40. The operator shall not burn in any fuel gas combustion device any fuel that contains hydrogen sulfide (H₂S) in excess of 0.1 gr/dscf (230 mg/dscm) [40 CFR 60.104(a)(1)] Federally Enforceable Through Title V Permit
41. For fuel gas combustion devices, a continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60.105(a)(3). CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, 60.105(a)(3)] Federally Enforceable Through Title V Permit
42. For fuel gas combustion devices, operator shall report all rolling 3-hour periods during which the average concentration of H₂S as measured by the H₂S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm) or during which the average concentration of SO₂ as measured by the SO₂ continuous monitoring system exceeds 20 ppm (dry basis, zero percent excess air). [40 CFR 60.105(e)(3)] Federally Enforceable Through Title V Permit
43. Operator shall determine compliance with the H₂S standard using EPA Methods 11, 15, 15A, or 16. [40 CFR 60.106(e)] Federally Enforceable Through Title V Permit
44. For any periods for which sulfur dioxide or oxides emissions data are not available, the operator shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 CFR 60.107(d)] Federally Enforceable Through Title V Permit
45. The owner or operator shall submit the reports required under this subpart to the District semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The owner or operator shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. [40 CFR 60.107(e) and 60.107(f)] Federally Enforceable Through Title V Permit
46. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
47. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
48. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-33-52-15

LEGAL OWNER OR OPERATOR: ALON BAKERSFIELD REFINING
MAILING ADDRESS: 6451 ROSEDALE HWY (AREA 1 & 2)
BAKERSFIELD, CA 93308

LOCATION: 6451 ROSEDALE HWY (AREA 1 & 2)
BAKERSFIELD, CA 93308

SECTION: 28 **TOWNSHIP:** 29S **RANGE:** 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 86.8 MM BTU/HR CATALYTIC REFORMING UNIT #26 INCLUDING A DEPENTANIZER SERVICE TOWER (26-V13), REBOILER STEAM CONDENSATE BALANCE DRUM (26-D31), 2 FEED/BOTTOMS EXCHANGERS (26-E45 A/B), 2 OVERHEAD CONDENSERS (26-E46 A/B), DISTILLATE COOLER (26-E47), 2 BOTTOMS PUMPS (26-P37 A/B), AND 2 REFLUX PUMPS (26 P38 A/B): PIPING MODIFICATIONS FOR PROCESSING OF GAS OIL

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Fugitive volatile organic compound (VOC) emissions shall not exceed 32.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

S-33-52-15: Dec 17 2010 10:37AM - EDGEHILR : Joint Inspection NOT Required

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5. Leaks from valves, connectors, and other components (except pumps and compressor seals) associated with piping modifications to route light naphtha from 26-V13 to CD Hydro Tech and subject to the provisions of Rule 4455 shall be defined as a VOC reading in excess of 100 ppmv above background on a portable hydrocarbon detection instrument calibrated with methane per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule] Federally Enforceable Through Title V Permit
7. Heaters 26H12 and 26H17 shall not be operated for any reason until necessary retrofits are made to comply with the applicable requirements of District Rules 4305, 4306 and 4351. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
8. No modifications to heaters 26H12 and 26H17 shall be performed without an Authority to Construct for that modification(s), except for changes specified in the condition below. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
9. The fuel supply line(s) shall be physically disconnected from heaters 26H12 and 26H17. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
10. Fuel gas sulfur content (as H₂S) shall not exceed 0.10 gr/dscf (160 ppmv) over a three-hour rolling average and shall be continuously monitored and recorded. [NSPS 40 CFR Part 60, Subpart J] Federally Enforceable Through Title V Permit
11. Permittee shall meet all applicable requirements of NSPS Subparts A, J, and GGG. [NSPS 40 CFR Part 60, Subparts A, J, and GGG] Federally Enforceable Through Title V Permit
12. Spent caustics and waste liquids shall be disposed of in a manner preventing the creation of odors. [District Rule 4102] Federally Enforceable Through Title V Permit
13. Leaks from valves and connectors associated with depentanizer (26-V13) fractionation trays, reboiler steam condensate balance drum (26-D31), 2 feed/bottoms exchangers (26-E45 A/B), 2 overhead condensers (26-E46 A/B), distillate cooler (26-E47), 2 bottoms pumps (26-P37 A/B), 2 reflux pumps (26 P38 A/B) and subject to the provisions of Rule 4455 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured one (1) cm from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Leaks from seals on pumps 26-P37A/B and 26-P38A/B and subject to the provisions of Rule 4455 shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured one (1) cm from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Vessels shall be depressurized (during turnaround) as required by Rule 4454. [District Rule 4454] Federally Enforceable Through Title V Permit
16. Heaters 26H12 and 26H17 emission rates shall not exceed NO_x (as NO₂): 0.18 lb/MMBtu or 147 ppmvd @ 3% O₂, and CO: 400 ppmvd @ 3% O₂. Emission limits are on a one hour average. [District Rules 2201, 4305, & 4351] Federally Enforceable Through Title V Permit
17. Emissions from heaters 26H11A/B, 26H13 and 26H15 shall not exceed any of the following limits: 0.0364 lb/MMBtu or 30 ppmvd NO_x @ 3% O₂, 0.024 lb-SO_x/MMBtu, 0.0076 lb-PM₁₀/MMBtu, 400 ppmvd CO @ 3% O₂ or 0.296 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
18. For heaters 26H11A/B, 26H13 and 26H15, the permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

19. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
21. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
22. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
23. Source testing for the indicated emission limits shall be performed within 60 days of recommencing operation of heaters 26H12 or 26H17. [District Rules 4305, 4306 and 4351] Federally Enforceable Through Title V Permit
24. Source testing to measure NO_x and CO emissions from heaters 26H11A/B, 26H13 and 26H15 while fired on natural gas shall be conducted within 60 days of initial start-up. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
25. Source testing to measure NO_x and CO emissions from heaters 26H11A/B, 26H13 and 26H15 while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
26. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
27. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
28. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
29. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
30. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

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31. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
32. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
33. Permittee shall maintain records of hhv of fuel burned and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
34. Heaters 26H12 and 26H17 shall not be operated unless the owner or operator applies to modify the Title V permit to address the requirements of District Rule 2520, section 9.0 for this permit unit. [District Rule 2520, 9.0] Federally Enforceable Through Title V Permit
35. Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
36. If permittee fails any compliance demonstration for NO_x and CO emission limits when testing not less than once every 36 months, compliance with NO_x and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 2520, 9.3.2, 4305 and 4351] Federally Enforceable Through Title V Permit
37. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NO_x emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NO_x emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rules 2520, 9.3.2, 4305, 6.3.2, and 4351, 6.3] Federally Enforceable Through Title V Permit
38. The following conditions must be met for representative unit(s) to be used to test for NO_x limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
39. All units in a group for which representative units are source for NO_x emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). These tune-up procedures shall be completed according to District Rule 4304 (Adopted October 19, 1995) and tune-up test results shall show comparable results for each unit in the group. Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rule 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
40. All units in a group for which representative units are source tested for NO_x emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type (e.g. from natural gas to oil) then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 2520, 9.3.2 and 4305, 6.3.2] Federally Enforceable Through Title V Permit
41. The number of representative units source tested for NO_x emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
42. The portable analyzer shall be calibrated prior to each use with a two-point calibration method (zero and span). Calibration shall be performed with certified calibration gases. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
43. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081(amended December 16, 1993), of 3 thirty-minute test runs for NO_x and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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44. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 19, 1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
45. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
46. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
47. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
48. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculate emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
49. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
50. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.3.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
51. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
52. Nitrogen oxide (NO_x) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO₂/MMBtu of heat input (hhv). [District Rule 2520, 9.3.2, 4305, 5.0, 8.2 and/or 4351, 8.1] Federally Enforceable Through Title V Permit
53. Nitrogen oxide (NO_x) emissions shall not exceed 140 lb/hr, calculated as NO₂. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit

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54. Except for complying with the applicable requirements of Sections 6.1 and 7.3, the requirements of this rule shall not apply to 1) components subject to Rule 4623 (adopted 5/19/05), 2) pressure relief devices, pumps, and compressors equipped with a closed vent system as defined in Section 3.0, 3) components buried below ground, 4) components exclusively handling liquid streams which have less than 10 percent by weight (<10 wt%) evaporation at 150 C, 5) components exclusively handling liquid streams with a VOC content less than ten percent by weight (<10 wt%), 6) components exclusively handling gas/vapor streams with a VOC content of less than one percent by weight (<1 wt%), 7) components incorporated in lines exclusively in vacuum service, 8) components exclusively handling commercial natural gas, and 9) one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the Air Pollution Control Officer (APCO) to be leak-free based on initial inspection. [District Rule 4455, 4.1 & 4.2] Federally Enforceable Through Title V Permit
55. The operator shall not use any component that leaks in excess of the allowable leak standards of this rule, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit
56. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit
57. The operator shall be in violation of this rule if any District inspection demonstrates that one or more of the conditions in Sections 5.1.4 exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit
58. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of this rule if the leaking components are repaired as soon as practicable but not later than the time frame specified in this rule. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit
59. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in this rule shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit
60. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of this rule regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in this rule. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit
61. A component shall be considered leaking if one of more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of the rule exist at the facility. [District Rule 4455, 5.1.4] Federally Enforceable Through Title V Permit
62. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and PRD in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using EPA Method 21. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3 of the rule. [District Rule 4455, 5.2.1 & 5.2.2; 40 CFR 60.482-2(a), (b) and (c); 40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit
63. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7; 40 CFR 60.482-2(a), (b) and (g); 40 CFR 60.482-7(a), (b), (g) and (h)] Federally Enforceable Through Title V Permit

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64. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3 of the rule. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8; 40 CFR 60.482-7] Federally Enforceable Through Title V Permit
65. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of this rule during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit
66. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11 and 40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit
67. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit
68. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. Any attempt by an operator to count such District inspections as part of the mandatory operator's inspections is considered to be willful circumvention and is a violation of this rule. [District Rule 4455, 5.2.13] Federally Enforceable Through Title V Permit
69. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected; and is found to be in compliance with the requirements of this rule. [District Rule 4455, 5.3.1, 5.3.2 & 5.3.3; 40 CFR 60.486(b)] Federally Enforceable Through Title V Permit
70. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit
71. If the leak has been minimized but the leak still exceeds the applicable leak standards of this rule, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit
72. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of this rule, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455, 5.3.6] Federally Enforceable Through Title V Permit

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73. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit
74. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit
75. After a release from a process PRD in excess of 500 pounds of VOC in a continuous 24-hour period, the operator shall immediately conduct a failure analysis and implement corrective actions as soon as practicable but not later than 30 days to prevent the reoccurrence of similar release. For refineries processing greater than 20,000 barrels of crude oil per day, any subsequent release in excess of 500 pounds of VOC within a continuous 24-hour period shall be subject to the requirements of Section 5.4.5. [District Rule 4455, 5.4.3 & 5.4.4] Federally Enforceable Through Title V Permit
76. The operator of a refinery processing greater than 20,000 barrels of crude oil per day shall connect all process PRDs serving that process equipment to an APCO-approved closed vent system as defined in Section 3.0 if any of the conditions specified in Sections 5.4.5.1 and 5.4.5.2 occurs. Process PRDs subject to the provisions of Section 5.4.5 shall be connected to an APCO-approved closed-vent system as soon as practicable, but no later than the first turnaround after the requirement to connect becomes effective. [District Rule 4455, 5.4.5] Federally Enforceable Through Title V Permit
77. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
78. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit
79. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1; 40 CFR 60.486(c)] Federally Enforceable Through Title V Permit

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80. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit
81. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit
82. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit
83. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit
84. Equivalent test methods other than specified in Sections 6.4.1 through 6.4.5 may be used provided such test methods have received prior approval from the US EPA, ARB, and APCO. [District Rule 4455, 6.4] Federally Enforceable Through Title V Permit
85. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1; 40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
86. The VOC content shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit
87. The percent by volume liquid evaporated at 150 C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit
88. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by US EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case Method 25a may be used. US EPA Method 18 may be used in lieu of US EPA Method 25 or US EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4455, 6.4.4] Federally Enforceable Through Title V Permit
89. Halogenated exempt compounds shall be analyzed by US EPA Method 18 or ARB Method 422 "Determination of Volatile Organic Compounds in Emission from Stationary Sources". [District Rule 4455, 6.4.5] Federally Enforceable Through Title V Permit
90. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

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91. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit
92. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit
93. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit
94. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit
95. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit
96. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit
97. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit
98. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2(h)] Federally Enforceable Through Title V Permit
99. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit
100. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit
101. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

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102. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit
103. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit
104. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit
105. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit
106. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit
107. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit
108. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit
109. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit
110. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit
111. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit
112. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

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113. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit
114. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit
115. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit
116. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit
117. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit
118. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit
119. Flares used to comply with Subpart GGG shall comply with the requirements of 40 CFR 60.18. [40 CFR 60.482-10(d)] Federally Enforceable Through Title V Permit
120. Owners or operators of control devices used to comply with the provisions of Subpart GGG shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10(e)] Federally Enforceable Through Title V Permit
121. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit
122. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

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123. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit
124. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit
125. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit
126. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit
127. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit
128. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit
129. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
130. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit
131. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

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132. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit
133. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit
134. The owner or operator shall determine compliance with the standards of flares as specified in 40 CFR 60.485(g)(1), (2), (3), (4), (5), (6), and (7). [40 CFR 60.485(g)] Federally Enforceable Through Title V Permit
135. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit
136. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit
137. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
138. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit
139. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), §60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

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140. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit
141. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit
142. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit
143. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit
144. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit
145. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [District 40 CFR 60.486(k)] Federally Enforceable Through Title V Permit
146. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit
147. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit
148. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit
149. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

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150. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit
151. Any existing reciprocating compressor that becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h) provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h). [40 CFR 60.593(c)] Federally Enforceable Through Title V Permit
152. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 °C as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit
153. Pumps in light liquid service and valves in gas/vapor and light liquid service within a procesic compounds of usually high molecular weight that consist of many repeated links, each link being a relatively light and simple molecule. [40 CFR 60.593(e)] Federally Enforceable Through Title V Permit
154. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
155. The operator shall not burn in any fuel gas combustion device any fuel that contains hydrogen sulfide (H₂S) in excess of 0.1 gr/dscf (230 mg/dscm) [40 CFR 60.104(a)(1)] Federally Enforceable Through Title V Permit
156. For fuel gas combustion devices, a continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60.105(a)(3). CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, 60.105(a)(3)] Federally Enforceable Through Title V Permit
157. For fuel gas combustion devices, operator shall report all rolling 3-hour periods during which the average concentration of H₂S as measured by the H₂S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm) or during which the average concentration of SO₂ as measured by the SO₂ continuous monitoring system exceeds 20 ppm (dry basis, zero percent excess air). [40 CFR 60.105(e)(3)] Federally Enforceable Through Title V Permit
158. Operator shall determine compliance with the H₂S standard using EPA Methods 11, 15, 15A, or 16. [40 CFR 60.106(e)] Federally Enforceable Through Title V Permit
159. For any periods for which sulfur dioxide or oxides emissions data are not available, the operator shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 CFR 60.107(d)] Federally Enforceable Through Title V Permit
160. The owner or operator shall submit the reports required under this subpart to the District semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The owner or operator shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. [40 CFR 60.107(e) and 60.107(f)] Federally Enforceable Through Title V Permit
161. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520.9.4.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

162. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
163. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
164. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart GGG. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
165. {4194} Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NOx emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NOx emission limit listed in Rule 4320. [District Rule 4320]
166. {4253} Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and Rule 4320]

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-33-56-27

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: ALON BAKERSFIELD REFINING
MAILING ADDRESS: 6451 ROSEDALE HWY (AREA 1 & 2)
BAKERSFIELD, CA 93308

LOCATION: 6451 ROSEDALE HWY (AREA 1 & 2)
BAKERSFIELD, CA 93308

SECTION: 28 **TOWNSHIP:** 29S **RANGE:** 27E

EQUIPMENT DESCRIPTION:

MODIFICATION OF HYDROCRACKER UNIT #21 INCLUDING 9 HEATERS, CATALYTIC ASSEMBLY, AND MISC AIR COOLERS, EXCHANGERS, DRUMS, AND PUMPS -AREA 2: PIPING MODIFICATIONS FOR PROCESSING GAS OIL

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Fugitive volatile organic compound (VOC) emissions shall not exceed 136.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), Correlation Equations Method. [District Rule 2201] Federally Enforceable Through Title V Permit

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YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

S-33-56-27; Dec 17 2010 10:37AM - EDGEHILL; Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

5. Leaks from valves, connectors, and other components (except pumps and compressor seals) associated with piping modifications to install bypasses and spillbacks around various heat exchangers, vessels and compressors; piping modifications to route a line from 21-E66 to 21-V12; piping modifications to put heaters 21-H20 and 21-H17 into rerun feed service; piping modifications to configure 21-V18 into diesel sidestripper for 21-V14; piping modifications to route hydrocracker naphtha to depentanizer and subject to the provisions of Rule 4455 shall be defined as a VOC reading in excess of 100 ppmv above background on a portable hydrocarbon detection instrument calibrated with methane per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Components shall be screened and leak rate shall be measured in accordance with the frequency of inspection specified in Rule 4455 as applicable. [District Rule] Federally Enforceable Through Title V Permit
7. Hydrocracker unit shall include two 40.0 MMBtu/hr charge heaters (21H11 and 21H12), two 18.1 MMBtu/hr heaters (21H13 and 21H14), two 11.4 MMBtu/hr heaters (21H15 and 21H16), one 27.8 MMBtu/hr heater (21H17), one 34.6 MMBtu/hr heater (21H18), one 65.0 MMBtu/hr heater (21H20), catalytic assembly, miscellaneous air coolers, heat exchangers, drums, pumps, piping, and vessels. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Firing rate of heater 21H20 shall not exceed 65.0 MMBtu/hr. [District Rules 2201 and 4306] Federally Enforceable Through Title V Permit
9. Continuous records of heater 21H20's firing rate, including volumetric fuel consumption rate (corrected for temperature) and hhv of fuel burned shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Except during startup and shutdown, heater 21H18 emission rates shall not exceed the following: NOx (as NO2) 0.036 lb/MMBtu or 30 ppmvd @ 3% O2, CO: 0.075 lb/MMBtu or 100 ppmv @ 3% O2, VOC: 0.005 lb/MMBtu, and PM10: 0.014 lb/MMBtu. [District Rules 2201, 4305, 4306, 4351] Federally Enforceable Through Title V Permit
11. Heater 21H20 emission rates shall not exceed NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv @ 3% O2, and CO: 400 ppmv @ 3% O2. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
12. Except during startup and shutdown, heater 21H11 emission rates shall not exceed NOx (as NO2) 30 ppmvd @ 3% O2, CO: 100 ppmvd @ 3% O2, VOC: 0.003 lb/MMBtu, and PM10: 0.014 lb/MMBtu. [District Rules 2201, 4305, 4306, 4351] Federally Enforceable Through Title V Permit
13. Except during startup and shutdown, heater 21H12 emission rates shall not exceed any of the following: NOx (as NO2): 30 ppmv @ 3% O2, CO: 100 ppmvd @ 3% O2, VOC: 0.003 lb/MMBtu, PM10: 0.014 lb/MMBtu, or SOx (as SO2): 0.0286 lb/MMBtu. [District Rules 2201, 4305, 4306, 4351] Federally Enforceable Through Title V Permit
14. Except during startup and shutdown, heaters 21H13 through 21H17 emission rates shall not exceed: NOx (as NO2): 0.036 lb/MMBtu or 30 ppmvd @ 3% O2, CO: 400 ppmvd @ 3% O2, VOC: 0.0055 lb/MMBtu, PM10: 0.0076 lb/MMBtu, or SOx (as SO2): 0.0286 lb/MMBtu.. [District Rules 2201, 4305, 4306, 4351] Federally Enforceable Through Title V Permit
15. Emission rates from heater 21H11 shall not exceed any of the following: PM10: 13.4 lb/day, SOx (as SO2): 27.5 lb/day, VOC: 2.9 lb/day, NOx (as NO2): 34.6 lb/day, or CO: 72.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
16. Emission rates from heater 21H12 shall not exceed any of the following: PM10: 13.4 lb/day, SOx (as SO2): 27.5 lb/day, VOC: 2.9 lb/day, NOx (as NO2): 34.6 lb/day, or CO: 72.0 lb/day [District Rule 2201] Federally Enforceable Through Title V Permit
17. Emission rates from heater 21H13 shall not exceed any of the following: PM10: 3.3 lb/day, SOx (as SO2): 12.4 lb/day, VOC: 2.4 lb/day, NOx (as NO2): 36.9 lb/day or 5,694 lb/year, or CO: 130.3 lb/day or 10,655 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Emission rates from heater 21H14 shall not exceed any of the following: PM10: 3.3 lb/day, SOx (as SO2): 12.4 lb/day, VOC: 2.4 lb/day, NOx (as NO2): 36.9 lb/day or 5,694 lb/year, or CO: 130.3 lb/day or 10,655 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Emission rates from heater 21H15 shall not exceed any of the following: PM10: 2.1 lb/day, SOx (as SO2): 7.8 lb/day, VOC: 1.5 lb/day, NOx (as NO2): 23.3 lb/day or 1,577 lb/year, or CO: 82.1 lb/day or 6,711 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

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20. Emission rates from heater 21H16 shall not exceed any of the following: PM10: 2.1 lb/day, SOx (as SO2): 7.8 lb/day, VOC: 1.5 lb/day, NOx (as NO2): 23.3 lb/day or 3,577 lb/year, or CO: 82.1 lb/day or 6,711 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Emission rates from heater 21H17 shall not exceed any of the following: PM10: 5.1 lb/day, SOx (as SO2): 19.1 lb/day, VOC: 3.3 lb/day, NOx (as NO2): 56.7 lb/day or 8,760 lb/year, or CO: 200.2 lb/day or 16,365 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Emission rates from heater 21H18 shall not exceed any of the following: PM10: 6.3 lb/day, SOx (as SO2): 23.7 lb/day, VOC: 4.2 lb/day, NOx (as NO2): 70.6 lb/day, or CO: 62.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
23. For heater 21H11 through 21H18, duration of start-up and shutdown shall not exceed 2 hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. [District Rules 4305 & 4306] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of duration of each start-up and shutdown for a period of five years and make such records readily available for District inspection upon request. [District Rules 2080, 4305 & 4306] Federally Enforceable Through Title V Permit
25. For heaters 21H13, 21H14, 21H15, 21H16, and 21H17, compliance with annual CO emission rate shall be determined by using CO emission concentrations obtained during monthly monitoring as required in this permit, fuel use, fuel heating value, and stack gas flow rate. Records of calculated CO emissions shall be maintained for a period of five years and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
26. For each heater, permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
27. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
28. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
29. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 2520, 9.4.2 4305 and 4306] Federally Enforceable Through Title V Permit

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30. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
31. Source testing to measure natural gas-combustion NO_x and CO emissions from each heater shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
32. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
33. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
34. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306, and 4351] Federally Enforceable Through Title V Permit
35. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306, 4351] Federally Enforceable Through Title V Permit
36. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
37. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
38. Permittee shall meet all applicable NSPS requirements, including Subparts A, J and GGG. [NSPS 40 CFR Part 60, Subparts A & J] Federally Enforceable Through Title V Permit
39. Permittee shall maintain records of hhv of fuel burned and cumulative annual fuel use for a period of five years and shall make such records readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
40. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Last Amended December 19, 1993). [District Rule 1081, and Kern County Rule 108.1] Federally Enforceable Through Title V Permit
41. Vessels shall be depressurized (during turnaround) as required by Rule 4454. [District Rule 4454] Federally Enforceable Through Title V Permit
42. Valves and connectors subject to Rule 4455 installed for production of low sulfur diesel shall not leak in excess of 100 ppmv above background when measured one (1) cm from the source. [District Rule 2201] Federally Enforceable Through Title V Permit
43. Pump and compressor seals subject to Rule 4455 that were installed for production of low sulfur diesel shall not leak in excess of 500 ppmv above background when measured one (1) cm from the source. [District Rule 2201] Federally Enforceable Through Title V Permit
44. Sulfur content (as H₂S) of fuel supplied to all heaters shall not exceed 0.1 gr/dscf (162 ppmv) based on a three hour rolling average and shall be continuously monitored and recorded. [NSPS 40 CFR Part 60, Subparts A & J] Federally Enforceable Through Title V Permit
45. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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46. {588} Particulate matter emissions shall not exceed 0.1 grain/dscf, 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
47. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO₂. Compliance with this requirement may be demonstrated by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.3.2 and District Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
48. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
49. When complying with SO_x emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
50. If the unit is fired on noncertified gaseous fuel and compliance with SO_x emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
51. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rules 2520, 9.3.2, 4305, 6.2.1, 4306, 6.2.1, and 4351, 6.2.1] Federally Enforceable Through Title V Permit
52. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period (Kern County Rule 407). To demonstrate compliance with this requirement the operator shall test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
53. Nitrogen oxide (NO_x) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and averaged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO₂/MMBtu of heat input (hhv). [District Rules 2520, 9.3.2, 4305, 5.0, 8.2, 4306, 5.0, 8.2, and/or 4351, 8.1] Federally Enforceable Through Title V Permit
54. Nitrogen oxide (NO_x) emissions shall not exceed 140 lb/hr, calculated as NO₂. [District Rules 4301, 5.2.2] Federally Enforceable Through Title V Permit
55. A component shall be considered leaking if one or more of the conditions specified in Sections 5.1.4.1 through 5.1.4.4 of Rule 4455 exist at the facility. For this permit unit, except for pumps and compressors, a minor gas leak shall be defined for any component listed in Rule 4455 Section 3.22 Table 1 in either liquid or gas/vapor service as a reading in excess of 100 ppmv above background up to and including a reading of 10,000 ppmv above background. For pumps, compressors and other component types not specifically listed in Rule 4455 Section 3.22 Table 1 in either liquid or gas/vapor service, a minor gas leak shall be defined as a reading in excess of 500 ppmv above background up to and including a reading of 10,000 ppmv above background. Readings shall be taken as methane using a portable hydrocarbon detection instrument and shall be made in accordance with the methods specified in Section 6.4.1 of Rule 4455. [District Rules 2201 and 4455, 5.1.4] Federally Enforceable Through Title V Permit

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56. The operator shall not use any component that leaks in excess of the allowable leak standards of Rule 4455, or is found to be in violation of the provisions specified in Section 5.1.3. A component identified as leaking in excess of an allowable leak standard may be used provided it has been identified with a tag for repair, has been repaired, or is awaiting re-inspection after repair, within the applicable time period specified within the rule. [District Rule Rule 4455, 5.1.1] Federally Enforceable Through Title V Permit
57. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4455, 5.1.2] Federally Enforceable Through Title V Permit
58. The operator shall be in violation of Rule 4455 if any District inspection demonstrates that one or more of the conditions in Sections 5.1.4 exist at the facility. [District Rule 4455, 5.1.3.1] Federally Enforceable Through Title V Permit
59. Except for annual operator inspection described in Section 5.1.3.2.3, any operator inspection that demonstrates that one or more of the conditions in Section 5.1.4 exist at the facility shall not constitute a violation of Rule 4455 if the leaking components are repaired as soon as practicable but not later than the time frame specified in Rule 4455. Such components shall not be counted towards determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.1] Federally Enforceable Through Title V Permit
60. Leaking components detected during operator inspection pursuant Section 5.1.3.2.1 that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in Rule 4455 shall be counted toward determination of compliance with the provisions of Section 5.1.4. [District Rule 4455, 5.1.3.2.2] Federally Enforceable Through Title V Permit
61. Any operator inspection conducted annually for a component type (including operator annual inspections pursuant to Section 5.2.5, 5.2.6, 5.2.7, or 5.2.8) that demonstrates one or more of the conditions in Section 5.1.4 exist at the facility shall constitute a violation of Rule 4455 regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in Rule 4455. [District Rule 4455, 5.1.3.2.3] Federally Enforceable Through Title V Permit
62. The operator shall audio-visually inspect for leaks all accessible operating pumps, compressors and Pressure Relief Devices (PRDs) in service at least once every 24 hours, except when operators do not report to the facility for that given 24 hours. Any identified leak that cannot be immediately repaired shall be reinspected within 24 hours using a portable analyzer. If a leak is found, it shall be repaired as soon as practical but not later than the time frame specified in Table 3. [District Rule 4455, 5.2.1 & 5.2.2] Federally Enforceable Through Title V Permit
63. The operator shall inspect all components at least once every calendar quarter, except for inaccessible components, unsafe-to-monitor components and pipes. Inaccessible components, unsafe-to-monitor components and pipes shall be inspected in accordance with the requirements set forth in Sections 5.2.5, 5.2.6, and 5.2.7. New, replaced, or repaired fittings, flanges and threaded connections shall be inspected immediately after being placed into service. Components shall be inspected using EPA Method 21. [District Rule 4455, 5.2.3, 5.2.4, 5.2.5, 5.2.6 & 5.2.7] Federally Enforceable Through Title V Permit
64. The operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually for a component type, provided the operator meets all the criteria specified in Sections 5.2.8.1 through 5.2.8.3. This approval shall apply to accessible component types, specifically designated by the APCO, except pumps, compressors, and PRDs which shall continue to be inspected on a quarterly basis. [District Rule 4455, 5.2.8] Federally Enforceable Through Title V Permit
65. An annual inspection frequency approved by the APCO shall revert to quarterly inspection frequency for a component type if either the operator inspection or District inspection demonstrates that a violation of the provisions of Sections 5.1, 5.2 and 5.3 of the rule exists for that component type, or the APCO issued a Notice of Violation for violating any of the provisions of Rule 4455 during the annual inspection period for that component type. When the inspection frequency changes from annual to quarterly inspections, the operator shall notify the APCO in writing within five (5) calendar days after changing the inspection frequency, giving the reason(s) and date of change to quarterly inspection frequency. [District Rule 4455, 5.2.9 & 5.2.10] Federally Enforceable Through Title V Permit

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66. The operator shall initially inspect a process PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the time of the release. To insure that the process PRD is operating properly, and is leak-free, the operator shall re-inspect the process PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the release using EPA Method 21. If the process PRD is found to be leaking at either inspection, the PRD leak shall be treated as if the leak was found during quarterly operator inspections. [District Rule 4455, 5.2.11] Federally Enforceable Through Title V Permit
67. Except for process PRD, a component shall be inspected within 15 calendar days after repairing the leak or replacing the component using EPA Method 21. [District Rule 4455, 5.2.12] Federally Enforceable Through Title V Permit
68. Upon detection of a leaking component, the operator shall affix to that component a weatherproof readily visible tag that contains the information specified in Section 5.3.3. The tag shall remain affixed to the component until the leaking component has been repaired or replaced; has been re-inspected using EPA Method 21; and is found to be in compliance with the requirements of Rule 4455. [District Rule 4455, 5.3.1 5.3.2 and 5.3.3] Federally Enforceable Through Title V Permit
69. An operator shall minimize all component leaks immediately to the extent possible, but not later than one (1) hour after detection of leaks in order to stop or reduce leakage to the atmosphere. [District Rule 4455, 5.3.4] Federally Enforceable Through Title V Permit
70. If the leak has been minimized but the leak still exceeds the applicable leak standards of Rule 4455, an operator shall repair or replace the leaking component, vent the leaking component to a closed vent system, or remove the leaking component from operation as soon as practicable but not later than the time period specified in Table 3. For each calendar quarter, the operator may be allowed to extend the repair period as specified in Table 3, for a total number of leaking components, not to exceed 0.05 percent of the number of components inspected, by type, rounded upward to the nearest integer where required. [District Rule 4455, 5.3.5] Federally Enforceable Through Title V Permit
71. If the leaking component is an essential component or a critical component and which cannot be immediately shut down for repairs, the operator shall minimize the leak within one hour after detection of the leak. If the leak has been minimized, but the leak still exceeds any of the applicable leak standards of Rule 4455, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4455 5.3.6] Federally Enforceable Through Title V Permit
72. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or any combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall comply with at least one of the requirements specified in Sections 5.3.7.1, 5.3.7.2, 5.3.7.3, or 5.3.7.4 by the applicable deadlines specified in Sections 5.3.7.5 and 5.3.7.6. If the original leaking component is replaced with a new like-in-kind component before incurring five repair actions for major leaks within 12-consecutive months, the repair count shall start over for the new component. An entire compressor or pump need not be replaced provided the compressor part(s) or pump part(s) that have incurred five repair actions as described in Section 5.3.7 are brought into compliance with at least one of the requirements of Sections 5.3.7.1 through 5.3.7.6. [District Rule 4455, 5.3.7] Federally Enforceable Through Title V Permit
73. The operator shall monitor process PRD by using electronic process control instrumentation that allows for real time continuous parameter monitoring or by using telltale indicators for the process PRD where parameter monitoring is not feasible. [District Rule 4455, 5.4.1] Federally Enforceable Through Title V Permit
74. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the APCO that enables an operator or District personnel to locate each individual component. The operator shall replace tags or labels that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. The operator shall comply with the requirements of Sections 6.1.4 if there is any change in the description of major components or critical components. [District Rule 4455, 5.5.1 & 5.5.2] Federally Enforceable Through Title V Permit
75. The operator shall keep a copy of the operator management plan at the facility and make it available to the APCO, ARB and US EPA upon request. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved operator management plan. [District Rule 4455, 6.1.2 & 6.1.4] Federally Enforceable Through Title V Permit

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76. The operator shall maintain an inspection log containing, at a minimum, 1) total number of components inspected, and total number and percentage of leaking components found by component types, 2) location, type, name or description of each leaking component, and description of any unit where the leaking component is found, 3) date of leak detection and method of leak detection, 4) for gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, 5) date of repair, replacement, or removal from operation of leaking components, 6) identification and location of essential component and critical components found leaking that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 7) methods used to minimize the leak from essential components and critical components that cannot be repaired until the next process unit turnaround or not later one year after leak detection, whichever comes earlier, 8) after the component is repaired or is replaced, the date of reinspection and the leak concentration in ppmv, 9) inspector's name, business mailing address, and business telephone number, and 10) the facility operator responsible for the inspection and repair program shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rule 4455, 6.2.1] Federally Enforceable Through Title V Permit
77. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, analyzer reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration. [District Rule 4455, 6.2.3] Federally Enforceable Through Title V Permit
78. The operator shall notify the APCO, by telephone or other methods approved by the APCO, of any process PRD release described in Sections 5.4.4 and 5.4.5, and any release in excess of the reportable quantity limits as stipulated in 40 CFR, Part 117, Part 302 and Part 355, including any release in excess of 100 pounds of VOC, within one hour of such occurrence or within one hour of the time said person knew or reasonably should have known of its occurrence. [District Rule 4455, 6.3.1] Federally Enforceable Through Title V Permit
79. The operator shall submit a written report to the APCO within thirty (30) calendar days following a PRD release subject to 6.3.1. The written report shall include 1) process PRD type, size, and location, 2) date, time and duration of the process PRD release, 3) types of VOC released and individual amounts, in pounds, including supporting calculations, 4) cause of the process PRD release, and 5) corrective actions taken to prevent a subsequent process PRD release. [District Rule 4455 6.3.2] Federally Enforceable Through Title V Permit
80. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rule 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit
81. Measurements of gaseous leak concentrations shall be conducted according to US EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in US EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 4455, 6.4.1] Federally Enforceable Through Title V Permit
82. The VOC content shall be determined using American Society of Testing and Materials (ASTM) D 1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4455, 6.4.2] Federally Enforceable Through Title V Permit
83. The percent by volume liquid evaporated at 150 C shall be determined using ASTM D 86. [District Rule 4455, 6.4.3] Federally Enforceable Through Title V Permit
84. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454, 4.0] Federally Enforceable Through Title V Permit

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85. The owner or operator may apply to the Administrator for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in Subpart GGG. In doing so, the owner or operator shall comply with the requirements of 40 CFR 60.484. [40 CFR 60.592(c)] Federally Enforceable Through Title V Permit
86. Each pump in light liquid service (PLLS) shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), and (f). Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. A leak is detected if an instrument reading of 10,000 ppm or greater is measured or if there are indications of liquids dripping from the pump seal. [40 CFR 60.482-2(a) and (b)] Federally Enforceable Through Title V Permit
87. When a leak is detected for each PLLS, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-2(c)] Federally Enforceable Through Title V Permit
88. Each PLLS equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a) provided the requirements specified in 40 CFR 60.482-2(d)(1) through (6) are met. [40 CFR 60.482(d)] Federally Enforceable Through Title V Permit
89. Any PLLS that is designated, as described in 40 CFR 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-2(a), (c), and (d) if the pump meets the requirements specified in 40 CFR 60.482-2(e)(1), (2), and (3). [40 CFR 60.482-2(e)] Federally Enforceable Through Title V Permit
90. If any PLLS is equipped with a closed vent system capable of capturing and transporting leakage from the seal or seals to a control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from the requirements of 40 CFR 60.482-2(a) through (e). [40 CFR 60.482-2(f)] Federally Enforceable Through Title V Permit
91. Any pump in PLLS that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR 60.482-2(a) and 40 CFR 60.482-2(d)(4) through (6) if: 1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-2(a); and 2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected. [40 CFR 60.482-2(g)] Federally Enforceable Through Title V Permit
92. Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR 60.482-2(a)(2) and (d)(4) and the daily requirements of 40 CFR 60.482-2(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly. [40 CFR 60.482-2(h)] Federally Enforceable Through Title V Permit
93. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(a)] Federally Enforceable Through Title V Permit
94. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60.485(c). [40 CFR 60.482-4(b)] Federally Enforceable Through Title V Permit
95. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of 40 CFR 60.482-4(a) and (b). [40 CFR 60.482-4(c)] Federally Enforceable Through Title V Permit

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96. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the 40 CFR 60.482-4(a) and (b), provided the owner or operator complies with the requirements in 40 CFR 60.482-4(d)(2) of this section. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9. [40 CFR 60.482-4(d)] Federally Enforceable Through Title V Permit
97. Except for in-situ sampling systems and sampling systems without purges, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b)(1), (2), (3), and (4). [40 CFR 60.482-5(a), (b), and (c)] Federally Enforceable Through Title V Permit
98. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times. [40 CFR 60.482-6(a) and (c)] Federally Enforceable Through Title V Permit
99. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 CFR 60.482-6(b)] Federally Enforceable Through Title V Permit
100. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of 40 CFR 60.482-6(a), (b) and (c). [40 CFR 60.482-6(d)] Federally Enforceable Through Title V Permit
101. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR 60.482-6(a) through (c) are exempt from the requirements of 40 CFR 60.482-6(a) through (c). [40 CFR 60.482-6(e)] Federally Enforceable Through Title V Permit
102. Each valve in gas/vapor service and in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with 40 CFR 60.482-7(b) through (e), except as provided in 40 CFR 60.482-7(f), (g), and (h), 40 CFR 60.483-1, 40 CFR 60.483-2, and 40 CFR 60.482-1(c). A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-7(a) and (b)] Federally Enforceable Through Title V Permit
103. Any valve in gas/vapor service or in light liquid service for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. [40 CFR 60.482-7(c)] Federally Enforceable Through Title V Permit
104. When a leak is detected for any valve in gas/vapor service or in light liquid service, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices specified in 40 CFR 60.482-7(e)(1), (2), (3), and (4), where practicable. [40 CFR 60.482-7(d) and (e)] Federally Enforceable Through Title V Permit
105. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve meets the requirements specified in 40 CFR 60.482-7(f)(1), (2), and (3). [40 CFR 60.482-7(f)] Federally Enforceable Through Title V Permit
106. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and 2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. [40 CFR 60.482-7(g)] Federally Enforceable Through Title V Permit

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107. Any valve in gas/vapor service or in light liquid service that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if: 1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface; 2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and 3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year. [40 CFR 60.482-7(h)] Federally Enforceable Through Title V Permit
108. The owner or operator may elect to comply with the applicable provisions for valves in gas/vapor service and in light liquid service as specified in 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)] Federally Enforceable Through Title V Permit
109. If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures: 1) The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of 40 CFR 60.482-8(b) through (d); or 2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak. A leak is detected if an instrument reading of 10,000 ppm or greater is measured. [40 CFR 60.482-8(a) and (b)] Federally Enforceable Through Title V Permit
110. When a leak is detected in pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e). [40 CFR 60.482-8(c) and (d)] Federally Enforceable Through Title V Permit
111. For closed vent systems and control devices, vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. [40 CFR 60.482-10(b)] Federally Enforceable Through Title V Permit
112. For closed vent systems and control devices, enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 degrees C. [40 CFR 60.482-10(c)] Federally Enforceable Through Title V Permit
113. Flares used to comply with Subpart GGG shall comply with the requirements of 40 CFR 60.18. [40 CFR 60.482-10(d)] Federally Enforceable Through Title V Permit
114. Owners or operators of control devices used to comply with the provisions of Subpart GGG shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. [40 CFR 60.482-10(e)] Federally Enforceable Through Title V Permit
115. Except as provided in 40 CFR 60.482-10(i) through (k), each closed vent system used to comply with the provisions of Subpart GGG shall be inspected according to the procedures and schedule specified in 40 CFR 60.482-10(f)(1) and (f)(2). Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h). A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. [40 CFR 60.482-10(f) and (g)] Federally Enforceable Through Title V Permit
116. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. [40 CFR 60.482-10(h)] Federally Enforceable Through Title V Permit

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117. If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2). [40 CFR 60.482-10(i)] Federally Enforceable Through Title V Permit
118. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10 (j)(1) and (j)(2). [40 CFR 60.482-10(j)] Federally Enforceable Through Title V Permit
119. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR 60.482-10(f)(1)(i) and (f)(2) if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3). [40 CFR 60.482-10(k)] Federally Enforceable Through Title V Permit
120. The owner or operator shall record the following information: 1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment; 2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment; 3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c); 4) For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and 5) For each visual inspection conducted in accordance with 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. [40 CFR 60.482-10(l)] Federally Enforceable Through Title V Permit
121. Closed vent systems and control devices used to comply with provisions Subpart GGG shall be operated at all times when emissions may be vented to them. [40 CFR 60.482-10(m)] Federally Enforceable Through Title V Permit
122. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in 40 CFR 60.485, except as provided in 40 CFR 60.8(b). [40 CFR 60.485(a)] Federally Enforceable Through Title V Permit
123. The owner or operator shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 as follows: Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used: (i) Zero air (less than 10 ppm of hydrocarbon in air); and (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.485(b)] Federally Enforceable Through Title V Permit
124. The owner or operator shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows: 1) The requirements of 40 CFR 60.485(b) shall apply. 2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. [40 CFR 60.485(c)] Federally Enforceable Through Title V Permit
125. The owner or operator shall test each piece of equipment unless demonstrated that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used: 1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment; 2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and 3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, the previous two procedures as specified in 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement. [40 CFR 60.485(d)] Federally Enforceable Through Title V Permit

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126. The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply: 1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 degrees F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference as seen in 40 CFR 60.17) shall be used to determine the vapor pressures; 2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight; and 3) The fluid is a liquid at operating conditions. [40 CFR 60.485(e)] Federally Enforceable Through Title V Permit
127. Samples used in conjunction with 40 CFR 60.485(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare. [40 CFR 60.485(f)] Federally Enforceable Through Title V Permit
128. The owner or operator shall determine compliance with the standards of flares as specified in 40 CFR 60.485(g)(1), (2), (3), (4), (5), (6), and (7). [40 CFR 60.485(g)] Federally Enforceable Through Title V Permit
129. An owner or operator of more than one affected facility subject to the provisions Subpart GGG may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility. [40 CFR 60.486(a)] Federally Enforceable Through Title V Permit
130. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply: 1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment; 2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months; and 3) The identification on equipment except on a valve, may be removed after it has been repaired. [40 CFR 60.486(b)] Federally Enforceable Through Title V Permit
131. When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: 1) The instrument and operator identification numbers and the equipment identification number; 2) The date the leak was detected and the dates of each attempt to repair the leak; 3) Repair methods applied in each attempt to repair the leak; 4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm; 5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak; 6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown; 7) The expected date of successful repair of the leak if a leak is not repaired within 15 days; 8) Dates of process unit shutdown that occur while the equipment is unrepaired; and 9) The date of successful repair of the leak. [40 CFR 60.486(c) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
132. The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location: 1) Detailed schematics, design specifications, and piping and instrumentation diagrams; 2) The dates and descriptions of any changes in the design specifications; 3) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring; 4) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and 5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5. [40 CFR 60.486(d)] Federally Enforceable Through Title V Permit
133. The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for equipment subject to the requirements of Subpart GGG; 2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). (ii) The designation of equipment as subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f) shall be signed by the owner or operator; 3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482-4; 4) (i) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), §60.482-4, and 60.482-7(f). (ii) The background level measured during each compliance test. (iii) The maximum instrument reading measured at the equipment during each compliance test; and 5) A list of identification numbers for equipment in vacuum service. [40 CFR 60.486(e)] Federally Enforceable Through Title V Permit

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134. The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location: 1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump; and 2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve. [40 CFR 60.486(f)] Federally Enforceable Through Title V Permit
135. The following information shall be recorded for valves complying with 40 CFR 60.483-2: 1) A schedule of monitoring; 2) The percent of valves found leaking during each monitoring period. [40 CFR 60.486(g)] Federally Enforceable Through Title V Permit
136. The following information shall be recorded in a log that is kept in a readily accessible location: 1) Design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and 2) Any changes to this criterion and the reasons for the changes. [40 CFR 60.486(h)] Federally Enforceable Through Title V Permit
137. The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d): 1) An analysis demonstrating the design capacity of the affected facility; 2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and 3) An analysis demonstrating that equipment is not in VOC service. [40 CFR 60.486(i)] Federally Enforceable Through Title V Permit
138. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [40 CFR 60.486(j)] Federally Enforceable Through Title V Permit
139. The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to Subpart GGG. [District 40 CFR 60.486(k)] Federally Enforceable Through Title V Permit
140. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486: 1) Process unit identification; 2) For each month during the semiannual reporting period, i) Number of valves for which leaks were detected as described in 40 CFR 60.482-7(b) or 40 CFR 60.483-2, (ii) Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7(d)(1), (iii) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i), (iv) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii), (v) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f), (vi) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1), and (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible; 3) Dates of process unit shutdowns which occurred within the semiannual reporting period; 4) Revisions to items reported in the semiannual report if changes have occurred since the initial report, as required in 40 CFR 60.487 (a) and (b), or subsequent revisions to the initial report. [40 CFR 60.487(c)] Federally Enforceable Through Title V Permit
141. An owner or operator electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions. [40 CFR 60.487(d)] Federally Enforceable Through Title V Permit
142. An owner or operator shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart GGG except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests. [40 CFR 60.487(e)] Federally Enforceable Through Title V Permit
143. The semiannual reporting requirements of 40 CFR 60.487(a), (b), and (c) remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of 40 CFR 60.487(a), (b), and (c), provided that they comply with the requirements established by the State. [40 CFR 60.487(f)] Federally Enforceable Through Title V Permit

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144. Compressors are exempt from the standards of Subpart GGG if the owner or operator demonstrates that a compressor is in hydrogen service. Each compressor is presumed not to be in hydrogen service unless an owner or operator demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen content in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used. An owner or operator may use engineering judgment demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When an owner or operator and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures that conform to the general method described in ASTM E-260, E-168, or E-169 shall be used to resolve the disagreement. If an owner or operator determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures that conform to the general method described in ASTM E-260, E-168, or E-169. [40 CFR 60.593(b)] Federally Enforceable Through Title V Permit
145. Any existing reciprocating compressor that becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h) provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR 60.482-3 (a), (b), (c), (d), (e), and (h). [40 CFR 60.593(c)] Federally Enforceable Through Title V Permit
146. An owner or operator may use the following provision in addition to 40 CFR 60.485(e): Equipment is in light liquid service if the percent evaporated is greater than 10 percent at 150 °C as determined by ASTM Method D86-78, 82, 90, 95, or 96. [40 CFR 60.593(d)] Federally Enforceable Through Title V Permit
147. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5). [40 CFR 60.482-1(d)] Federally Enforceable Through Title V Permit
148. The operator shall not burn in any fuel gas combustion device any fuel that contains hydrogen sulfide (H₂S) in excess of 0.1 gr/dscf (230 mg/dscm) [40 CFR 60.104(a)(1)] Federally Enforceable Through Title V Permit
149. For fuel gas combustion devices, a continuous emissions monitoring system shall be installed, calibrated, operated, and reported according to EPA guidelines as specified under 40 CFR 60.105(a)(3). CEM results shall be calculated on a rolling three (3) hour basis. [40 CFR 60, 60.105(a)(3)] Federally Enforceable Through Title V Permit
150. For fuel gas combustion devices, operator shall report all rolling 3-hour periods during which the average concentration of H₂S as measured by the H₂S continuous monitoring system exceeds 0.10 gr/dscf (230 mg/dscm) or during which the average concentration of SO₂ as measured by the SO₂ continuous monitoring system exceeds 20 ppm (dry basis, zero percent excess air). [40 CFR 60.105(e)(3)] Federally Enforceable Through Title V Permit
151. Operator shall determine compliance with the H₂S standard using EPA Methods 11, 15, 15A, or 16. [40 CFR 60.106(e)] Federally Enforceable Through Title V Permit
152. For any periods for which sulfur dioxide or oxides emissions data are not available, the operator shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability. [40 CFR 60.107(d)] Federally Enforceable Through Title V Permit
153. The owner or operator shall submit the reports required under this subpart to the District semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. The owner or operator shall submit a signed statement certifying the accuracy and completeness of the information contained in the report. [40 CFR 60.107(e) and 60.107(f)] Federally Enforceable Through Title V Permit
154. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NO_x emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NO_x emission limit listed in Rule 4320. [District Rule 4320] Federally Enforceable Through Title V Permit

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155. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070 and 4320] Federally Enforceable Through Title V Permit
156. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2520, 4305, and 4306] Federally Enforceable Through Title V Permit
157. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
158. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4451 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
159. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4452 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
160. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart GGG. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
161. Prior to operating under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of VOC emissions: 343 lb/quarter. Offset shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 12/18/2008). [District Rule 2201] Federally Enforceable Through Title V Permit
162. ERC Certificate Number S-3469-1 (VOC), (or certificates split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-33-405-1

LEGAL OWNER OR OPERATOR: ALON BAKERSFIELD REFINING
MAILING ADDRESS: 6451 ROSEDALE HWY (AREA 1 & 2)
BAKERSFIELD, CA 93308

LOCATION: 6451 ROSEDALE HWY (AREA 1 & 2)
BAKERSFIELD, CA 93308

EQUIPMENT DESCRIPTION:

MODIFICATION OF ORGANIC LIQUID TRANSFER OPERATION WITH TWO BAYS, EACH WITH TWO LIQUID
UNLOADING ARMS: ADD TWO LOADING BAYS

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Only organic liquids with an API gravity of 30 deg or lower shall be processed by organic liquid transfer facility. [District Rule 2201] Federally Enforceable Through Title V Permit
4. There shall be no more than 696 disconnects per day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Organic liquid transfer operation shall include dry-break couplers or equivalent on unloading lines with no greater than 8 ml liquid per disconnect based on an average from 3 consecutive disconnects. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Sayed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services

6-33-405-1: Dec 20 2010 8:17AM - EDGEHILL : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

6. All unloaded liquids and gases shall be routed to one of the following systems: a vapor collection and control system; a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a closed VOC emission control system. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit
7. Emissions from fugitive emissions components and excess liquid drainage from organic liquid transfer facility shall not exceed 11.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. For this Class 1 organic liquid transfer facility, the emission of VOC from the transfer operation shall not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred. [District Rule 4624] Federally Enforceable Through Title V Permit
9. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute; or for organic liquids other than gasoline, the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane when measured in accordance with the test method in Section 6.3.7; gasoline, a concentration of VOC greater than 10,000 ppmv, as methane, above background when measured in accordance with the test method in Section 6.3.7. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from equipment into a container is not considered a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4624] Federally Enforceable Through Title V Permit
10. A gas or liquid leak is a violation of this permit and shall be reported as a deviation. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
11. The operator of an organic liquid transfer facility shall inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the test method prescribed in Section 6.3.8 of Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
12. An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during the inspections required under provisions of Sections 5.9.1 and 5.9.2 of Rule 4624 during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection the frequency shall revert back to quarterly and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit
13. A floating roof container that meets the applicable control requirements of Section 5.0 of Rule 4623 (Storage of Organic Liquids) shall be considered not leaking when receiving unloaded liquids for compliance with Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
14. All equipment that are found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
15. Operator shall keep records of the throughputs of materials transferred and the results of any required leak inspections. [District Rule 4624] Federally Enforceable Through Title V Permit
16. Daily records of the number of disconnects from organic liquid transfer facility shall be maintained, retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. The permittee shall keep accurate daily records of API gravity and types of organic liquids transferred for a period of five years, and shall make such records available for District inspection upon request. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
18. All records required by this permit shall be retained for a period of at least 5 years and shall be made available to the District upon request. [District Rules 1070 and 4624] Federally Enforceable Through Title V Permit

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